

The Compact Program

Millennium Challenge Account – Moldova

Monitoring and Evaluation Plan

October 2010

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1. PREAMBLE

This Monitoring and Evaluation (M&E) Plan:

- is part of the action plan set out in the MILLENNIUM CHALLENGE COMPACT (Compact) signed on 01/22/2010 between the United States of America, acting through the Millennium Challenge Corporation, a United States government corporation (MCC), and the Republic of Moldova (Moldova), acting through its government;
- supports provisions described in *Annex III. Description of Monitoring and Evaluation Plan* of the Compact;
- is governed and follows principles stipulated in the *Policy for Monitoring and Evaluation of Compacts and Threshold Programs* (DCI-2007-55.2 from 05/12/2009) (MCC M&E Policy).

This M&E Plan is considered a binding document, and failure to comply with its stipulations could result in suspension of disbursements. It may be modified or amended as necessary following the MCC M&E Policy (article 5.2), and if it is consistent with the requirements of the Compact and any other relevant supplemental legal documents.

2. OVERVIEW

The Government of the Republic of Moldova and the Millennium Challenge Corporation, on behalf of the United States Government, have signed a Compact Agreement for a US \$262 million grant to be implemented over a 5 year period. The Compact was signed on January 22nd, 2010 and entered into force on September 1st, 2010.

The Republic of Moldova has a population of 3.57 million inhabitants (without the Transnistrian region). Approximately 60% of the population lives in rural areas. In 2008 the economically active population of Moldova constituted around 1.3 million people. The employed population constituted 1.25 million people, of which nearly one third were active in the agricultural sector.

Moldova was one of the most important suppliers of agri-food products within the former USSR and the policies that governed the agricultural sector were based on three main pillars: (i) collectivization and agri-industrial integration, (ii) controlled prices and margins, (iii) and rural industrialization. The state was the dominant actor in pursuing these policies and production was dominated by about one thousand collective and state agricultural enterprises. After the collapse of the Soviet Union and declaration of its independence in 1991, Moldova's economy, including the agricultural sector, declined. Thus the country declined to the poorest in Europe, with poverty becoming a reality for the local population. The decline mostly affected the rural population, due to several factors:

- economic breakdown associated with the break-up of the USSR and continuing economic difficulties in its main markets;
- fundamental reforms of the agricultural production systems by implementing decollectivization initiatives of reorganization, privatization and land redistribution;
- considerable cost-price squeeze.

Unfortunately Moldova's economic growth since 2000 affected the agricultural sector to a limited degree; rural infrastructure remains poor, and agricultural technologies are inadequate. The rural population lacks on-farm and off-farm opportunities for income generating activities and employment due to poor access to reliable water, lack of financing, lack of access to markets, poor technologies, and lack of know-how. Since half of the active labor force (52.9% in 2009¹) lives in rural areas, where they depend on agriculture for their livelihoods, the majority of them remain very poor and locked in to subsistence production. The rural poor constituted some 67.8% of the total rural population in 2008.

Given the situation in rural areas, the Compact Program involves crucially needed investments in road and agricultural infrastructure, transfer of irrigation management to users, improved water management and increased access to finance, training, and market information. It is comprised of two Projects: the Roads Rehabilitation Project, which aims to enhance transportation conditions; and the Transition to High-Value Agriculture (THVA) Project, which aims to create efficient replicable models of transition to high-value agriculture in centrally irrigated areas and an enabling environment (legal, financial, and market) for replication of the models, with the intended impact to increase incomes and reduce poverty rates.

Monitoring and Evaluation is essential for a results-based approach to program management. It was a key component of program design and remains incorporated into all facets of the program cycle through to program completion.

¹ Moldova National Bureau of Statistics

3. PURPOSE

This Monitoring and Evaluation Plan serves as a guide for program implementation and management, so that MCA-Moldova Management staff, Steering Committee members, Consultative Group members, program implementers, beneficiaries, and other stakeholders understand the progress being made toward the achievement of objectives and results, and are aware of variances between targets and actual achievement during implementation.

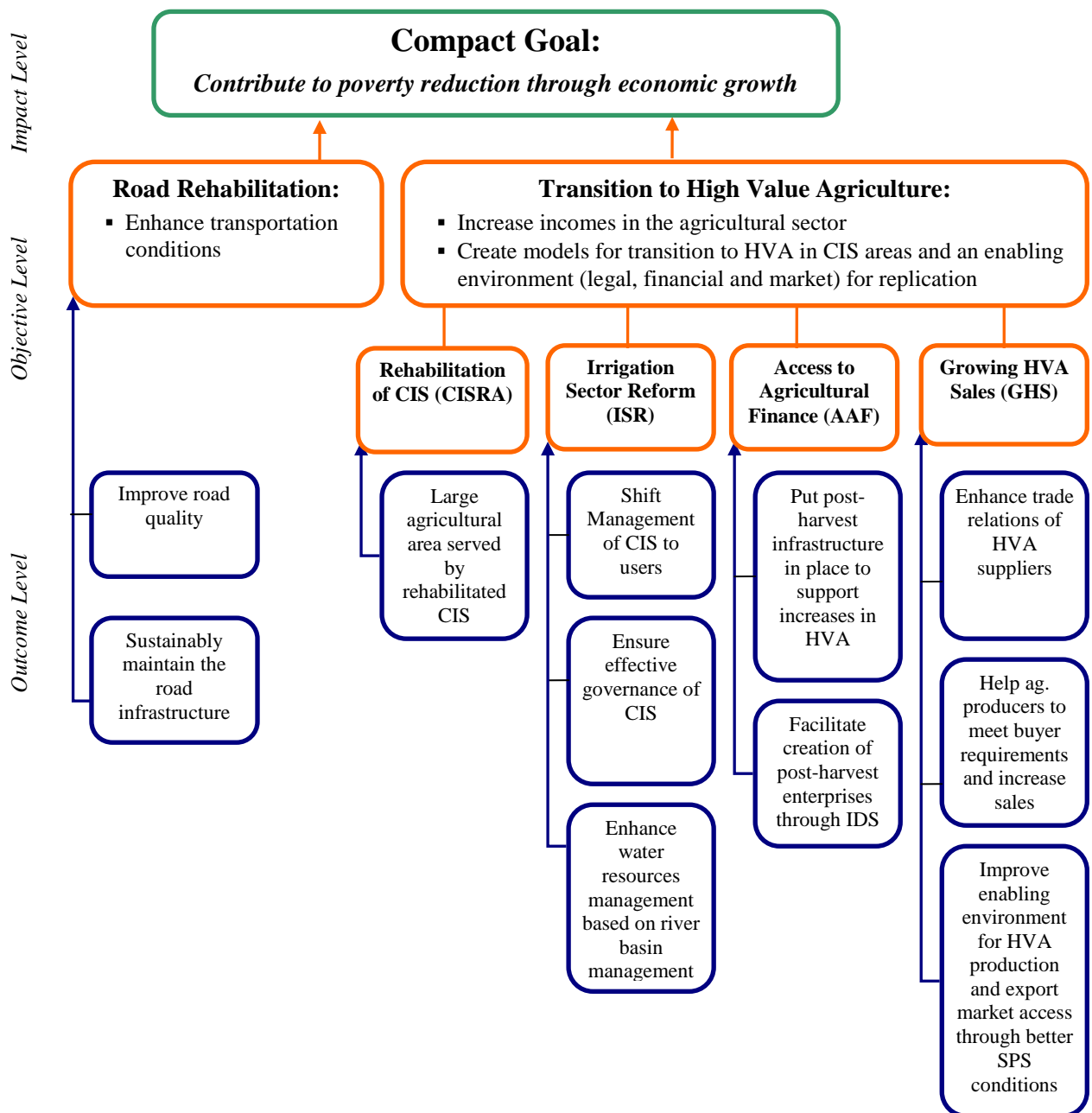
This Monitoring and Evaluation Plan is a management tool that provides the following functions:

- Gives details about what impacts the Compact and each of its components are expected to produce in economic, social, and gender areas and how these effects will be achieved.
- Explains in detail how the Millennium Challenge Account (MCA) Moldova and MCC will monitor and assess the Compact Program interventions to determine whether they are achieving their intended results and measure their larger impacts over time through rigorous evaluations.
- Establishes a process to alert implementers, stakeholders and MCC to any problems in program implementation and provides the basis for making any needed program adjustments.
- Outlines the flow of data and information from the project sites through to the various stakeholders both for public consumption and to inform decision-making. It sets the mechanisms that assure the quality, reliability and accuracy of program performance information and data.
- Outlines any M&E requirements that MCA-Moldova must meet in order to receive disbursements.
- Provides programmatic information and data for evidence-based decision making concerning expansion of selected interventions meant to serve as a model, under the current Compact, for subsequent replication.

4. PROJECT DESCRIPTION AND OBJECTIVES

4.1. Program Logic

The diagram below illustrates and describes the causal relationships among the program components and synthesizes expected outcomes intended to achieve the project objectives and the program goal.



Decisions to support the investments proposed by the Government of Moldova were based on economic rates of return (ERRs) greater than or equal to double the average of the economic growth

rates in Moldova over the previous three years - 12.6². The hurdle rate for the irrigation rehabilitation project was lowered to 10 percent, since some components of the project are deemed to have positive spillover effects for other areas of the country. Monitoring indicators for the two Projects are tied closely to the assumptions used in the economic analysis of the Projects, and the baselines and targets for the objective level indicators have been extracted from the economic analyses.

It is expected that the implementation of the Compact will contribute to the achievement of national level goals as specified in the National Development Strategy. Goal level results to which the Project contributes, but are not solely attributable to the Project, are: a) absolute poverty rate nationwide: from 30.2% to 20.0% by the year 2015; and b) absolute rural poverty rate: from 34.1% to 22.6% by the year 2015.

4.2. Program Beneficiaries

According to the MCC “Guidelines for Economic and Beneficiary Analysis”, beneficiaries of projects are considered individuals that are expected to experience better standards of living due to Compact activities aimed to increase their real incomes. The economic rate of return analysis for proposed projects gives details on benefit streams through which beneficiaries should experience increased income (and is found in a later section of this plan).

At present there are approximately 273,000 potential beneficiaries living along the road³ proposed for rehabilitation within the Compact program, and approximately 29,000 individuals living outside the region who would also benefit by using the road for long-distance travel. In total, it is expected that approximately 302,000 beneficiaries will benefit from the Road Rehabilitation Project or approximately 78,000 households. This beneficiary count encompasses the users and owners of motorized vehicles utilizing the road, including local agricultural and other producers and buyers; providers and users of passenger transport services; and non-commercial owners of private motorized transport. Sellers, merchandisers, and consumers of products transported along this road will likely benefit as well.

Beneficiaries of the Transition to High Value Agriculture Project include households with owners or shareholders of farming enterprises, farmers or owners of land, producers and intermediaries investing in and working in the high agriculture value sector, and laborers employed in the operation of enterprise farms within the command areas where the Compact will rehabilitate the irrigation systems and producers and agribusinesses outside the systems targeted for rehabilitation that are already engaged in the high value agriculture sector. Up to 3,100 farm households are expected to benefit from the rehabilitation of centralized irrigation systems. Demand for seasonal labor is projected to increase as farms switch from grains to more labor-intensive high value agriculture crops. A projected 9,300 employees, most of whom are poor, will realize increased wage income due to greater demand for agricultural labor in the centralized irrigation system areas. Landowners will also benefit from the increased productivity and value of their land once it has access to irrigation. It is projected that approximately 15,500 individuals renting out their agricultural land will realize increased rent income. The Access to Agricultural Finance Activity will directly benefit more than 100 post-production investors.

A general overview of the span of program benefits across the population of Moldova, used for Compact justification to MCC’s Investment Committee, is presented in the table below.

² This hurdle rate corresponds to MCC Guidelines for Economic Analysis dated April 2009

³ During the original beneficiary analysis, the catchment area was defined as raions and towns through which the road passes. This is larger than a 5 km buffer and justified by the road’s status as a major artery.

Overview of Program Beneficiaries Projected 20 Years After Compact EIF (Households⁴)

Project	Value
Transition to High Value Agriculture Project	
<i>CISRA and ISRA</i>	
Number of beneficiary farm households	3,100
Number of potential employees reaping wage increases	9,300
Number of individuals renting out their land potentially reaping rental increase	15,000
<i>AAF:</i>	
Number of entrepreneurs receiving credit	100
<i>GHS:</i>	
Farmers receiving knowledge of and implementing technical assistance practices (outside of CIS only to avoid double counting of beneficiaries)	1,300 ⁵
<i>THVA: Total number of beneficiary households</i>	<i>28,800</i>
Road Rehabilitation Project	
<i>Road Rehabilitation: Total number of beneficiary households</i>	<i>78,000⁶</i>
Compact Total	106,800⁷

4.3. Transition to High Value Agriculture Project (THVA)

4.3.1. THVA Project Overview

The Transition to High Value Agriculture Project consists of reinforcing and integrating activities that, when implemented together, address the key constraints facing Moldovan producers: lack of reliable water, lack of financing, lack of access to markets and technologies, and lack of know-how. The THVA Project will increase the ability and willingness of farmers to make the transition to higher value fruit and vegetable production. By addressing infrastructure and institutional/market constraints, the THVA Project will break the vicious cycle of poor water service, low water tariff revenue, underinvestment in irrigation system maintenance, and low investment by farmers in high value agriculture (resulting in low agricultural incomes). The THVA Project provides the first opportunity to pilot a set of institutional and management reforms, together with much needed infrastructure rehabilitation that will set the stage for future investment and enable Moldova to benefit from its natural comparative advantage in agriculture.

The four THVA activities are:

- Centralized Irrigation System Rehabilitation Activity (CISRA) that will rehabilitate up to 11 irrigation systems covering a command area of up to approximately 15,500 hectares;
- Irrigation System Reform Activity (ISRA) that will provide technical assistance and capacity building to (1) support legal transfer of management and operations of MCC-rehabilitated systems from the Government to Water User Associations (WUA), (2) improve water resource

⁴ Households can be converted to individuals at a rate of 3.86 individuals per households.

⁵ GHS is expected to train 2,000 outside of CIS and 2,300 within CIS for a total of 4,300 farmers trained. Of those trained, 65% are assumed to adopt the new practices. Therefore 1,300 adopt new practices outside of CIS and 1,500 adopt new practices inside of CIS for a total of 2,800 adopting. Those trained inside the CIS areas are already counted in the CISRA compartment of the table.

⁶ This number is estimated on the file named Road Beneficiary and Indicators Calculations.xls, tab BA, M2-Drochia Junction.

⁷ The CISs and road are geographically separate so overlap of beneficiaries between the projects is expected to be negligible.

management, including establishment of a modern water rights system, and (3) ensure the legal and institutional framework needed for private and/or donor investment in the irrigation sector;

- Access to Agriculture Finance (AAF) that will provide term financing and technical assistance to support high value agriculture-related investments by farmers and rural entrepreneurs;
- Growing High value agriculture Sales (GHS) will provide market development support and technical assistance and training to help producers and agribusinesses better access high value agriculture markets and support the shift to high value agriculture at the production and post-harvest level, and promote sustainable agricultural practices.

To carry out management responsibilities related to the THVA Project, MCA-Moldova intends to assign implementation responsibilities to implementing units (Implementing Entities) as follows:

- The Implementing Entity for both CISRA and ISRA is “Apele Moldovei” (AM), currently legal owner of irrigation infrastructure assets. A special Implementing Entity Agreement will be concluded between MCA-Moldova and AM outlining tasks and responsibilities. However, since AM faces a very constrained budget to properly deploy needed expertise and manpower to manage the implementation of these two Activities, MCA-Moldova will seek the services of a qualified management and engineering consulting firm to act as Project Implementation Manager (the PIM Consultant) for CISRA and ISRA. As the project manager, the PIM Consultant will provide technical support and oversight services to MCA-Moldova to ensure the CISRA and ISRA activities are fully integrated, and the related Compact targets and results are on track to be achieved in a timely manner. As such, the PIM Consultant will be the first contact for these consultants and contractors for the review and pre-clearance of all deliverables, supervising day-to-day activities, monitoring and reporting on the timely physical and financial progress of these contracts, and making recommendations to MCA-Moldova for the next steps, including the payment of invoices.
- The Implementing Entity for the Access to Finance (AAF) Activity will be the Credit Line Directorate (CLD), which is a structure of the Ministry of Finance specifically created to manage multiple donor credit lines through the banking systems of Moldova. The management of the Access to Finance Activity will take place jointly by the CLD and MCA-Moldova. MCA-Moldova will seek the services of a specialized consultant through a separate contract to help launch and monitor this activity.
- The Growing High Value Agriculture Sales (GHS) Activity will be co-financed by MCC and USAID. It is expected that USAID will manage the GHS Activity under the upcoming USAID Agricultural Competitiveness and Enterprise Development Project (ACED). In coordination with MCC and MCA-Moldova, USAID as the implementing agency will bear responsibility for the achievement of the Activity’s goals. A Memorandum of Understanding about the roles and responsibilities of USAID, MCC and MCA with respect to the implementation and coordination of the GHS will be defined in Q1 2011 and include setting of proper targets and reporting mechanisms for the implementing contractor.

4.3.2. Outline of THVA Economic Analysis

The underlying economic analysis and assumptions for the THVA project were prepared by MCC in consultation with MCA shortly before Compact signing. The economic analysis spreadsheets can be found on MCC’s website under “Programs and Activities” and then “Economic Rates of Return.”

Economic analysis of the THVA Project was done separately for the Access to Agricultural Finance Activity (AAF) and the “Irrigated Agriculture” group of activities, which encompasses the CIS Rehabilitation, Irrigation Sector Reform, and Growing HVA Sales Activities. Although the AAF Activity is deemed to be complementary to the other THVA activities, the direct beneficiaries of the

two groups of activities may be very different. In particular, entrepreneurs, farmers, farmer groups, and other non-farm investors both within and outside the rehabilitation project areas will have access to and potentially benefit from the AAF Activity, and impacts on the Irrigated Agriculture beneficiaries are likely to be indirect.⁸

4.3.3. CISRA and ISRA: Economic Analysis and Assumptions

The ERR for the CIS Rehabilitation Activity, Growing HVA Sales Activity, and ISRA combined is approximately 14.3 percent. To arrive at the aggregate ERR, individual ERRs were calculated for each irrigation system and these range from 8.8 to 17.7 percent. The costs of the ISRA, the Growing HVA Sales Activity, and Implementing Entity support to AM are assigned proportionally by hectare across all systems selected for rehabilitation. Some aspects of the Growing HVA Sales Activity – in particular, the improvement of the enabling environment for HVA (i.e. Sanitary and Phytosanitary Standards and agricultural policy improvements) – will support the system specific ERRs, but could also carry benefits to the national HVA sector, and the Project-level ERR does not include the benefits accruing outside these systems (which if included would raise the aggregate ERR).

The main economic impact of the Irrigated Agriculture group of activities will be to raise farmers' crop incomes dramatically, from an estimated per hectare profit of approximately US\$150-200 to over US\$500 for grain crops, depending upon the size of farm and region of the country, and from an estimated per hectare profit of approximately US\$300-450 to approximately US\$1200-2700 per hectare for fruits and vegetables. At the same time, the fraction of land irrigated and cropped to HVA will rise significantly.⁹ The increase in farm profits will cover the cost of irrigation even in systems where irrigation cost will increase, even under somewhat conservative profitability assumptions. All production costs, including farm household labor and capital investment costs, are included in the profitability figures. It is expected that farmers will have a strong incentive, therefore, to irrigate and adopt HVA. Moreover, even if those farmers currently farming in these areas are not interested, the land market in Moldova appears to function sufficiently well that landowners will have opportunities to lease their land to farmers that do wish to grow HVA and can therefore afford to pay the higher rents one can expect on irrigated land. Other farmers may also migrate or expand into these areas and take advantage of the opportunity presented by irrigation. Thus the gains in productivity and profitability will be shared with landowners, as more competition for productive land will eventually lead to an increase in land prices. In addition, increased HVA production will raise the demand for some forms of labor, including casual harvest-season labor, and raise incomes for poor agricultural laborers.

The economic impacts of the irrigated agriculture group of activities were estimated using data collected through a detailed socio-economic survey of Moldovan farmers working both in the systems to be rehabilitated and outside these areas. Using the data, econometric estimates were obtained of the impact of providing varying degrees of water service reliability on three outcomes: (i) farmers' decision to irrigate; (ii) the fraction of land cropped to high value crops; and (iii) farm income. Impacts were estimated controlling for a variety of factors that may affect these outcomes.¹⁰ The analysis showed that farmers are more likely to irrigate and grow high value crops if water provision is more reliable, and that in areas where it is reliable, the fraction of land devoted to high value crops is

⁸ The River Basin Management Sub-Activity will potentially also have national benefits, but its inclusion in the project is primarily motivated by the need to ensure sustainable water resource use in the rivers from which the MCC CIS Rehabilitation Activity will draw, and is therefore both a mitigation and a pillar of the Irrigation Sector Reform Activity.

⁹ The model assumes 45 percent of project area land will be irrigated in the first year following rehabilitation, given the 50 percent requirement for participation in the project. By Year 10 after Compact Entry Into Force, 85 percent of the land is projected to be irrigated, and 60 percent of the land used for HVA production.

¹⁰ This includes household composition, size of farm, level of education or training, and observed and unobserved system-area-specific factors. In addition, a two-step procedure was used to account for potential simultaneity related to unobserved farm characteristics.

relatively high. In addition, the ERR was adjusted to account for the difference between average rainfall conditions and the conditions in the 2008 growing season.

Various sensitivity analyses were performed throughout the development of the project, and there are many factors that could change the economic impacts of the project. If water service delivery is not sufficiently sustainable, the ERRs drop significantly, to well below the hurdle rate. Thus, the strength of the ISRA, the WUA and Water Laws, and their implementation, are critical to the success of the project. In addition, output prices/ profitability; the transition time, currently estimated at eight years, to maximum adoption; and of course project costs are all important sensitivity factors.

4.3.4.AAF: Economic Analysis and Assumptions

The AAF Activity ERR is projected at 11.5 percent, with a likely rate of 5-19 percent. The main benefit streams of the Activity are: (i) the private returns (enjoyed by investors receiving financing) to the investments that result from the AAF Activity; and (ii) the benefits to producers through higher fruit and vegetable prices as these products enter an improved post-harvest system.¹¹ Without the latter benefit stream, currently assumed to increase producer profitability in the CIS rehabilitation areas by 5 percent, the ERR would be at the low end of this range.

The returns estimated in the AAF Activity ERR are particularly uncertain, given the lack of evidence that similar programs have had sufficient impact to justify their costs, and the plausible range falls well below the hurdle rate for Moldova. Key parameters having an important effect on this ERR are unknown, but it is possible to establish a range for most of them, given the assumption that investors and banks are rational, and given recent Moldovan credit market conditions. Because the project relies on the financial sector and investors to take and evaluate risks, it is unlikely that the project will result in a high fraction of projects that do not cover the social cost of capital in Moldova. Nonetheless, some such projects could be financed. This risk increases with the subsidy element, which is highest under the Risk Capital Incentive Fund. At the same time, given the partial development of the Moldovan financial sector, there is a genuine risk that the THVA Project will have lower returns overall due to a lack of access to finance.¹² Even if sufficient long-term financing were already available at market rates, the free market may not produce the optimal level of investment in a sector with high risks and returns, and in Moldova there are not adequate means for investors to hedge their risk. Delivering an investment subsidy through the private financial sector as this program does is, arguably, a reasonable approach, as it allows private investors and banks to evaluate the most optimal size, type, location, and configuration of investments within the category of investments to be subsidized. By making the financing available to any eligible borrower through any eligible financial institution, the risk of distorting the allocation of resources in the economy is somewhat reduced, especially if the interest subsidy is low.¹³

The key unknown sensitivity factors for the AAF Activity ERR are as follows: (i) the degree of ‘additionality’ of the resulting investments (that is, the degree to which the AAF Activity induces investments that would not take place otherwise, rather than simply subsidizing those investors’ or lenders’ returns); (ii) the social rate of return on those investments that are induced (this could be lower than the social cost of capital, since there is an interest subsidy element, particularly through the Risk

¹¹ Whereas it may seem reasonable to assume that any additional producer profits would be competed away, and entrepreneurs would reap all the profits from the improved cold chain, some degree of income benefit will probably still flow to producers, who will have a longer selling season and enjoy greater market access.

¹² The farm survey shows that farmers who have taken out credit in the recent past have tended to expand the area cropped to HVA, probably through greenhouses, tunnels, and intercropping. While the program will not be used for on-farm equipment, this is evidence that access to credit through the financial sector has an impact on agricultural investments in the country.

¹³ In theory, the broader the category and eligibility, the less distortions such subsidies would produce. Governments or donors “picking winners and losers” can be especially problematic.

Capital Incentive Fund); (iii) the risk premium required by investors to invest in projects that have an acceptable economic return but are nonetheless risky for that investor; (iv) the debt-equity mix for a typical investment in Moldova; and (v) the degree to which the profits from the CIS Rehabilitation Activity would decline in the absence of the investments stimulated by this project.

4.3.5. GHS: Economic Analysis and Assumptions

By enhancing farmers' know-how and access to markets, the Growing HVA Sales Activity will support and ensure the profitability increases projected in the aforementioned analysis. The analysis counts as a cost of the project only the fraction of the total costs of the larger joint MCA-Moldova and -USAID Growing HVA Sales Activity equal to the fraction of total farmer beneficiaries represented by the irrigation systems to be rehabilitated using Compact funds, or approximately 53 percent.

Whereas it is difficult to estimate the exact magnitude of Growing HVA Sales Activity benefits, there is some evidence that the issues to be addressed by this activity require attention, and that as designed, the Activity will have a positive impact on incomes.

Respondents to the farm survey ranked risk surrounding the marketing of crops and output prices as their foremost obstacle to adopting HVA, apart from water.¹⁴ In addition, since the CIS Rehabilitation Activity will substantially increase the amount of land under irrigation and thus the supply of fruits and vegetables within Moldova, it is likely that the prices enjoyed by farmers in 2008 would fall somewhat without the Growing HVA Sales Activity. Whereas Moldovan farmers exhibit a relatively high level of education for a developing country, in many cases they may lack up-to-date technical knowledge and market connections needed to meet market demands and make the investments needed. Indeed, farmers claiming to have the know-how to access external markets in particular exhibited higher profitability in the farm survey. Anecdotal and quantitative evidence of impacts of similar programs to provide technical assistance to farmers in Moldova and Albania show increases in incomes, in some cases significant, resulting from providing technical assistance to farmers facing plant protection and other issues. While these reported results may be biased, as there was no control in the study for annual effects on crop profitability, the combined evidence is highly suggestive. Moreover, to the extent that the Growing HVA Sales Activity is successful in improving access to EU-registered seeds in a timely manner and meeting SPS standards in regional markets, this Activity would have an important impact on farm incomes throughout Moldova.

4.4. Road Rehabilitation Project

4.4.1. Road Rehabilitation Project Overview

The Road Rehabilitation Project will be implemented by State Road Administration, a Public Entity which bears responsibility for road development and maintenance in Moldova. According to MCA-Moldova and MCC assessments, SRA has relatively good management capacity and relevant experience to efficiently implement the project. That capacity will be extended by additional financing from MCA-Moldova to establish a compact but efficient implementation team within the SRA.

¹⁴ The econometric tests using cropping and income data did not detect a statistically significant impact of farmer extension/training on cropping patterns or income.

4.4.2. Road Rehabilitation Project: Economic Analysis and Assumptions

ERR calculations for the M2 Road to be rehabilitated from the Compact funds has been made based on two different maintenance scenarios: (i) “optimal” or recommended post-rehabilitation maintenance, and (ii) “business as usual” (BAU) post-rehabilitation maintenance. The latter assumes maintenance levels consistent with Moldova’s recent past performance, which is significantly below the optimal level. Given Moldova’s past performance in maintaining its road network, the most prudent approach to selecting MCC investments was to use the BAU maintenance assumptions. The economic analysis spreadsheets can be found on MCC’s website under “Programs and Activities” and then “Economic Rates of Return.”

The segment of the M2 road was chosen for rehabilitation. Due to the significant volume of traffic on this segment, the projected economic rate of return for the proposed rehabilitation of the M2 from Sarateni to the Drochia junction is robust, at approximately 21.1 percent (using conservative calculation with BAU scenario).¹⁵ This rate of return was calculated using the Highway Design and Maintenance Standards Model (HDM-IV) which was developed by World Bank’s Transportation Department.

The feasibility consultants concluded that there is little possibility that the road rehabilitation would generate or divert additional traffic beyond normal traffic growth. Thus, only normal traffic is used in the analysis. It is assumed that this traffic will grow with respect to the economy with an elasticity of 1.65 through 2019 and 1.40 from 2020 onwards for passenger vehicles, and of 1.20 for freight carrying vehicles through the entire period from 2009 to 2030. Both of these estimates are based on empirical analysis of these elasticities over the past several years. GDP growth was projected using an average of IMF, EBRD, and other projections, with the resulting assumptions of 3 percent growth until 2011, 4 percent from 2012-2019, and 3 percent thereafter.

This resulted in traffic counts for the relevant segments as shown:

Estimated Traffic Levels on M2 Road Segments

M2 sections		km	AADT 2009	AADT 2015	AADT 2025
a	Sarateni – Floresti	27.1	2,556	3,600	6,000
b	Floresti – Soroca	47.6	3,429	4,900	8,100
c	Soroca - Drochia junction	18.0	2,469	3,500	5,800
d	Drochia junction - Arionesti	31.0	786	1,100	1,800
--	Arionesti – Otaci	10.0	786	1,100	1,800

As shown, traffic volumes are relatively high between Sarateni and the Drochia junction, the segment proposed for rehabilitation. Volumes drop considerably after the Drochia junction, and the origin-destination surveys showed a relatively high proportion of local trips. Thus, the M2 road will produce considerable benefits even without reconstruction to the border with Ukraine at Otaci or Unguri.¹⁶

The resulting median/ most likely traffic growth scenario used in the ERR, from year 2010 onward is as follows:

¹⁵ The period of analysis is twenty years

¹⁶ There are three small border crossings to Ukraine in the vicinity of Soroca.

Distribution of Projected M2 Traffic Growth by Vehicle Type

Type of Vehicle	To 2011	2012-2020	2021--
Passenger vehicles	5.0%	6.6%	4.2%
Freight vehicles	3.6%	4.8%	3.6%

Based upon the HDM results, substantial project benefits would result from improvements to the current (June 2009) road surface, which exhibits a high roughness index (average overall roughness of 10/11 IRI). Without the project, significant annual patching would be required to keep the road reasonably serviceable, and even in this case it would remain rough. Therefore, reconstruction is a preferred option over just performing periodic maintenance. Moreover, the ERR does not differ substantially between the ‘optimal’ maintenance and BAU maintenance scenarios, and is sufficiently high for both. This is because the road is in such poor condition that project benefits will be very high in the early years, whereas on this particular road the volume of traffic and conditions do not dictate a high level of frequent periodic maintenance (resurfacing, etc.).

Consultants did not attempt to quantify possible accident reduction benefits, and thus these are not included in the analysis. The calculated rates of return include some project management costs, as well as environmental and social mitigation costs (assumed at 2.5 percent).

5. MONITORING COMPONENT

The Compact will be monitored systematically and progress reported regularly through the indicator tracking table (ITT). There are five levels of monitoring that follow from the program logic framework: (i) impact (goal), (ii) objective, (iii) outcome, (iv) output and (v) process. The various indicator levels map to the logical framework and thus allow Project developers and managers to understand to what extent planned activities are achieving their intended objectives. Monitoring data will be analyzed regularly to allow managers of MCA-Moldova and MCC to make programmatic adjustments as necessary with a view towards improving the overall implementation and results of the Program.

5.1. Indicators

The M&E plan is framed and constructed using the program logic framework approach that classifies indicators as process milestones, output, outcome, objective, and impact (goal indicators).

Goal indicators monitor progress on Compact goals and help determine if MCA-Moldova and MCC are meeting their founding principle of poverty reduction through economic growth. The Objective indicators measure the intermediate or long-term effects on an intervention's outputs. Outcome indicators measure intermediate or medium-term effects of an intervention.. Output indicators measure the direct result of the project activities—most commonly these are goods or services produced by the implementation of an activity. Process Milestones record an event or a sign of progress toward the completion of project activities. They are a precursor to the achievement of Project Outputs and a way to ensure the work plan is proceeding on time to sufficiently guarantee that outcomes will be met as projected.¹⁷

MCC has introduced common indicators for external reporting across all MCC Compacts. MCC sector experts have developed these indicators to document sector level progress relevant to different project activity types. The common indicators relevant to the MCA Moldova Compact are included in this M&E plan.

The Indicator Definition Table provides relevant details for each indicator by Project and can be found in Attachment 4. It provides descriptions for the indicator structure by specifying each indicator's: (i) title; (ii) definition; (iii) unit of measurement; (iv) data source; (v) method of collection; (vi) the frequency of collection; and (vii) party or parties responsible.

To ensure that the Program is on track to meet its overall Goals and Objectives, the monitoring indicators will be measured against established baselines and targets, derived from ex-ante economic rate of return analysis, other types of analysis, and project planning documents. The targets reflect the underlying assumptions made in program design about what each activity would likely achieve. Baselines and target levels for each indicator are defined in Attachment 5.

Indicators may need to be modified in future versions of the M&E Plan. Annex III of the Compact outlines the impact-, objective-, and outcome-level indicators. The M&E Plan builds on this information with output and process indicators developed by MCA-Moldova project managers and implementers in the early stage of project implementation. The M&E Unit shall consult and assist in setting up each implementer's monitoring plan.

¹⁷ The indicator levels are formally defined in MCC's *Policy for Monitoring and Evaluation of Compacts and Threshold Programs*.

Modification and revisions to the indicators may only be made according to the MCC M&E Policy.

5.1.1.Indicator Definitions

This M&E Plan provides a succinct description of each indicator in Attachment 4. The definition of the Outcome and Objective indicators was driven by the M&E Units of MCC and MCA-Moldova in close coordination and are derived from Compact documents, the economic analysis, the baseline survey, participatory exercises with stakeholders' participation, from national strategies and sector papers including the National Development Strategy, and statistics published by the National Bureau of Statistics. The definitions for Output and Process indicators are (or will be if outstanding) derived from Compact documents, Implementing Entities and implementers' workplans, and MCC external reporting requirements.

5.1.2.Data Sources

Data sources have been identified and vetted for all the indicators listed in Attachment 4. Generally, monitoring data will be obtained from various primary sources, ranging from Implementing Entities and Service Providers to the MCA/MCC surveys. In addition, the MCA-Moldova M&E unit will obtain secondary data for the high level (Objective and Impact) indicators from the relevant government agencies including National Bureau of Statistics.

Since GHS Activity of THVA Project is implemented by USAID in a direct agreement with MCC, the data flow on project implementation and progress, including project milestones and output indicators, will be directed to MCC. MCC will share this data with MCA-Moldova in a convenient and timely way.

5.1.3.Method of Data Collection

The data for many objective and outcome indicators will be drawn from surveys conducted by MCA-Moldova in conjunction with Implementing Entities and Service providers while the lower-level indicators will be drawn from the Project implementers' records. Indicators will be reported through a Management Information System (MIS). Data will be reported to MCA-Moldova on a monthly, quarterly, or annual basis, depending on the indicator's requirements. To ensure this, MCA-Moldova will set proper cooperation and collaboration with Implementing Entities and Contractors by putting necessary requirements for Contractors to develop and put in place proper reporting mechanisms, including potentially connection to MCA-Moldova's future MIS.

Where and if necessary, MCA-Moldova will commission surveys to collect special data in coordination with the institutions in charge of each project area. Data collection instruments (including surveys and data collection forms and registries) will be designed in a participatory manner with the Dedicated Teams of the relevant Implementing Entities. In order to provide for the specific needs of evaluations, Impact Evaluators shall be involved in the design of the surveys, including in setting the survey strategy, designing questionnaires and helping developing TORs for survey contractors. Water users/ clients/ beneficiaries registries, kept by implementers, will serve as one source for the sample frames. Therefore the M&E Unit will need to coordinate with the ISRA project to ensure these registries are sufficiently designed to serve as sample frames.

The specific schedule of surveys is captured in the M&E Work Plan (Attachment 7).

5.1.4. Frequency of Data Collection

During the Compact period, data will be collected on a monthly, quarterly or annual basis, depending on the indicator.

Some of the Contractors and Implementing Entities will be required to report on project milestones and outputs quarterly, others annually. Those arrangements will be recorded in the respective contractor's TORs and Implementing Entity Agreements. Decisions on frequency will be taken for each individual implementation-related contract to reconcile MCA-Moldova's need for fresh data with administrative burden and cost efficiency.

5.2. Baseline and Performance Targets

The baselines and targets for each indicator are shown in Attachment 5. Targets are derived from 1) the initial economic analysis used in justifying Program investments, 2) project documents, 3) discussions with experts and consultants, and 4) implementation work plans.

Baseline figures should be established using the most current and appropriate data available prior to an Activity's implementation. This can include the MCC/MCA Baseline Survey, government surveys such as those conducted by the National Bureau of Statistics, and other organizations' records. If baseline figures are revised from those used in the economic analysis, the Activity's targets, should be revised accordingly. Any revision of baselines and targets must adhere to MCC's policies regarding baseline and target revisions and will require MCC's formal approval.

5.2.1. Disaggregation of Data

Where applicable, the data will be collected, analyzed, and reported by income level, gender, age groups, and farm size of beneficiaries in order to portray the benefits accruing to the different constituencies of the population. Additional data disaggregation will be used when necessary to investigate particular issues such as social infrastructure, rural business, transportation, etc. This information will be public and will be available on the MCA Moldova web page.

Attachment 6 identifies which indicators should be disaggregated, to the extent that it is feasible and cost-effective. Select disaggregated figures identified in Attachment 6 will be reported to MCC in the quarterly Indicator Tracking Table.

5.2.2. Pending Baselines and Targets

A number of each Project's indicators, baselines and targets are currently pending, particularly for lower level output and process indicators. The majority of these baselines and targets will be established once the feasibility and design studies' results are known. Others are pending updated data from once implementation contracts are awarded and contractors have presented their work plans.

6. EVALUATION COMPONENT

6.1. General Approach to Evaluation and Surveys

Evaluations assess as systematically and objectively as possible the Program's rationale, relevance, effectiveness, efficiency, merits, sustainability and impact. The evaluations will strive to estimate the impacts on the targeted beneficiaries and wider regional or national economy. The evaluations will provide MCC, MCA-Moldova and other stakeholders with information during the Compact on whether or not the intended outcomes are likely to be achieved and at the Compact's end on the impacts that are attributable to the Program.

The evaluation strategy will be based upon scientific models that ensure the advantages of neutrality, accuracy, objectivity and the validity of the information. These models will comprise experimental and quasi-experimental designs as well as statistical modeling. Methodologies will be selected considering cost-effectiveness. Participant-oriented models will supplement the evaluation strategy to emphasize the central importance of rural individuals as beneficiaries of the Compact.

More than formal documentation of Program results, evaluation will serve as a learning tool during Compact implementation and beyond. MCC will strive to conduct evaluations in a participatory way to ensure their success and relevance while protecting the evaluations' objectivity. The participatory approach will also include continuous training for Program staff and stakeholders on evaluation methods. Participatory, qualitative evaluation will provide an opportunity to better understand stakeholders' perceptions of the results, engage a broad cross-section of stakeholders including by gender, and enhance ownership of the outcome of the development process.

The Respective Roles of MCA-Contracted Evaluations and MCC Impact Evaluations

Both MCC and MCA Moldova will fund evaluations of the Moldova Compact from their respective budgets. MCA Moldova will fund Ad Hoc Evaluations and Mid-Term/Final Evaluations. MCC will fund Impact Evaluations of every Project.

The roles of the various evaluations are different and are intended to be complementary. The primary difference is the source of funds and the respective scopes. Methodologies also tend to differ though not necessarily. Common differences for each evaluation are noted in the following sections. The table below highlights some key differences.

Common Differences among Evaluations Types

	Mid-Term and Final Evaluation	MCC Impact Evaluation	Ad Hoc Evaluations
Main Objective	Evaluate Compact progress and results in a comprehensive manner	Establish impacts against a modeled counterfactual	Address short-term information gaps
Methodologies	<ul style="list-style-type: none">• Interviews• Case studies• Statistical analysis of primary data• Summaries of secondary data (including Impact Evaluations)	<ul style="list-style-type: none">• Experiments• Quasi-experiments• Advanced statistical analysis	(varies)

Strengths	<ul style="list-style-type: none"> • Broad survey of all issues • Focus on implementation issues 	<ul style="list-style-type: none"> • Attempts to establish attribution • Focus on high level results (impacts) • Use of highly specialized researchers • Quantitative focus 	<ul style="list-style-type: none"> • Executed quickly • In depth analysis of a single issue
Funding	MCA Compact	MCC administrative budget	MCA Compact

6.1.1.Mid-term Evaluation

The Mid-term Evaluation will assess progress towards meeting the Compact goals, objectives and outcomes. It will provide early lessons learned and identify significant discrepancies between expected results and actual achievements, including an analysis of these discrepancies. The specific purposes of the mid-term evaluation will be as follows:

- To assess the actual implementation of activities compared to original implementation plans. An account of “actual” compared to “designed” activities will help inform the final evaluation by defining what the intervention in fact was;
- To examine what aspects of the program components are most and least effective and how effectively these components contribute to achievement of projects’ objectives and program outputs. Correspondingly, the evaluation would be used to inform any mid-course corrections;
- To assess implementation progress and help MCA Moldova identify actions that will lead to successful implementation.

6.1.2.Final Evaluation

The Final Evaluation will be a major component of the Compact Completion Report (CCR). The CCR is the close-out report required by MCC; the CCR will require reporting from several units within MCA-Moldova, not only M&E. The Final Evaluation is the portion of this report which is contributed by the MCA M&E unit.

The Final Evaluation will assess the actual results of the Program against the Compact goals, objectives and outcomes. The emphasis of the evaluation will be to assess how Compact activities have affected poverty and economic growth, while also examining the more general impact of the Program and the sustainability of the projects. Therefore the final evaluation will include the following issues:

- In what ways and to what extent has the Compact program made a positive impact on poverty reduction and economic growth;
- To what extent were the planned objectives achieved for the program;
- Effectiveness of program activities: Which of Compact program components were the most effective? Why? Which program components were the least effective? Why?
- Attribution of measurable outcomes to MCC/MCA Moldova interventions;
- Reasons behind the success or failure to achieve goals, objectives and targets;
- What were the most significant constraints and/or difficulties in implementing the program and, where appropriate, how did Compact overcome them;

- Unintended results of the program (positive and negative);
- Long-term sustainability of results;
- Re-estimated economic rates of return, comparisons to original estimates, and assessment of differences;
- Lessons learned applicable to similar projects;
- To what extent were the recommendations from the Mid-Term evaluation implemented.

6.1.3.MCC Impact Evaluations

One of the key features of MCC's approach to development assistance is its strong commitment to conducting rigorous impact evaluations to find out more largely whether the Compact had the desired effects on individuals, households, and institutions and whether those effects are attributable to the program intervention. Impact evaluations will also explore the distribution effect or the extent to which project benefits reach the poor and the impact that these benefits have on their welfare. Impact evaluations will employ, whenever possible, methodologies that determine whether results can be reliably attributed to MCC funded interventions through a control group or 'counterfactual'.

To ensure impact evaluations are of a high quality, MCC directly procures and funds the impact evaluation teams.

6.1.4.Ad Hoc Evaluations and Special Studies

MCC or MCA-Moldova may request ad hoc evaluations or special studies of Projects, Project Activities or the Program as a whole prior to the expiration of the Compact Term to be conducted by an outside entity contracted in compliance with MCC Program Procurement Guidelines. Ad Hoc Evaluation and Special Studies are designed to provide Management staff, Steering Committee members, program implementers, beneficiaries, and other stakeholders with information about Program implementation and results than cannot be uncovered from performance monitoring or Impact Evaluation alone. A number of such studies/evaluations have been initiated /conducted or are planned including the following:

Moldovan Farm Operators Survey was conducted in 2009 and was aimed to measure the anticipated impact of an MCC investment in the rehabilitation of centralized water pumping systems and small-scale irrigation on the transition of Moldovan farms to high value, fruit and vegetable production. The survey was designed to allow MCC to answer various questions regarding THVA Project, such as: What would the demand for water be per system if irrigation were available? What would be the likely magnitude of net benefits that would accrue from expansion of irrigation services? To whom would benefits accrue from expansion of irrigation services and what is the profile of these beneficiaries, including poorer segments of the rural population? What would be the likely magnitude of net benefits that would accrue from expansion of financial services for on farm investments? Would there be factors that would prevent women from fully participating in and benefiting from the project? A stratified sampling strategy was employed to measure the demands and benefits of a rehabilitated system for different size (small, medium and large) farms.

Moldova Farm Survey gender Assessment. Based on the Moldovan Farm Operators Survey, the assessment was aimed to unfold the existing gender similarities and differences of Moldovan farmers to understand gender roles and responsibilities, sources of existing inequities and consequences to the participation of male and female beneficiaries in THVA Project.

Social Audit (proposed study) to examine civil society feedback on issues of transparency and effectiveness of the Compact implementation: transparency in financial management, effectiveness of the consultation mechanisms, and feedback from final beneficiaries on how projects are impacting them and their opinion of the MCA Moldova program.

Implementing Entity Satisfaction Study (proposed study) aimed to evaluate the satisfaction level of implementing entities working with MCA Moldova.

Credit and Finance Study (proposed study) aimed at tracking the value of and number of rural and agricultural loans in Moldova given by the Program and by other institutions, disaggregated by different classes of customers (women versus men, first-time versus repeat borrowers, other demographic characteristics, etc). In addition, the study will track loan terms (interest rates and tenure) and portfolio health (repayment rates, portfolio-at-risk, etc.) of the Program and other institutions and other banking system liquidity and solvency measures. This study will be conducted several times during the course of the Compact (based on project roll-out and MCC recommendations).

6.2. Specific Evaluation Plans

6.2.1. ISRA and CISRA Evaluation

Evaluation Questions

- Primary questions:
 1. To what extent do farm profits increase due to rehabilitation of the CIS and change in management arrangements combined? To what extent do hectares of irrigated crops increase? To what extent do hectares of HVA increase?
 2. How much do rent payments to land owners in CIS area increase?
 3. How much does the wage bill paid to laborer in CIS area increase?
 4. To what extent is there an effect of IMT that is independent of CIS? How does this vary by system or community characteristics?
- Secondary questions:
 1. Does training of farmers in techniques of irrigated agriculture and marketing in combination with improved irrigation create greater impacts than improved irrigation alone?
 2. How does any change in crop productivity affect the quantity of household and formal labor employed across gender and age demographics?
 3. Do men/ or women report more or less direct involvement in the management, production, or sale grown on household garden plots as a result of CIS project?
 4. What fraction of any increased wage income accrues to males versus females?
 5. Do small farmers benefit proportionately to the larger, wealthier farmers? Is there a relative benefit across farm sizes or do certain farmers benefit disproportionately from access to irrigation and transition to high value agriculture?

Evaluation Methodology

At the time of Compact EIF, a basic evaluation design was established. Comparison of similar farms determined through propensity score matching as well as comparisons on the same farms in a pre-post analysis shall provide quantitative measures of the magnitude of the changes from CIS-IMT activities.

To complement the quantitative analysis the evaluation methodology will employ a qualitative analysis. Because the intervention areas have already been determined, comparison groups will be drawn through quasi-experimental methods and propensity-score matching will ensure the comparison groups are similar to the treatment groups on observable characteristics,

The MCC Impact Evaluation Consultant in consultation with MCC and MCA will finalize the evaluation design early in Year 1 of the Compact. A summary of the final design will be included as an attachment to this M&E Plan.

Data

Two data sources are considered for conducting IMT-CIS evaluations:

- Farm Operator Survey 2009, conducted within 16 CIS and comparison group of farmers with access to water outside CIS areas.
- MCA Farm Surveys. These surveys will be follow-ons to the Farm Operator Survey 2009 and are planned for CIS beneficiaries in years 2-5 of the Compact. The MCC Impact Evaluation Consultant will take the leading role in preparing this survey strategy. A local contractor with guidance from the impact evaluation consultant will conduct the field work, including the following major steps: sample frame definition, sampling design, questionnaire design, interviewer training, developing and testing questionnaire, interviewing, elaboration of the database and data entry, analyzing and presenting survey results, as well as other relevant aspects of a survey.

Reporting

A Mid-Term Evaluation Report is due 36 months after Entry into Force of the Compact, i.e. QIII 2013, and Final Impact Evaluation Report has to be submitted by July 31st, 2015.

6.2.2.AAF Evaluation

Evaluation Questions

- Primary questions:
 1. To what extent does access to MCC's medium-long term loan facility financed under the AAF Activity increase investment, and in particular in HVA-related assets, including post-harvest assets?
 2. How much greater are estimated/projected incomes for borrowers as a result of any increased investment caused by the activity?
 3. What is the relative importance of factors influencing the impact?
 4. How sustainable are any impacts on the provision of medium to longer term credit to agriculture or post-harvest investors likely to be?
- Secondary questions:
 1. How the impacts differ by key characteristics of the investor (pre-program income, assets, farm size, gender, age)?
 2. To what extent are any impacts on lending, investment, and future incomes due to increased access to longer term financing?

3. To what extent does the provision of Business Development Services to investors improve the success of the investment?
4. To what extent does the existence and mode of operation of the AAF Activity impact the loan application rate and level of borrowing and investment made by female applicant over the status quo?

Evaluation Methodology

At the time of Compact EIF, a basic evaluation design was established. Randomized selection of approved applicants and a regression discontinuity approach represent the two most promising strategies for the AAF evaluation.

Under Rolling Randomized Selection applicants denied credit will serve as a control group to provide data on counterfactual outcomes to be compared to the treatment group. These individual applicants may or may not be affected by other components of the THVA project. However, if there are sufficient applications for loans to finance investments within the CIS areas, then an interaction effect may be identifiable.

In case randomized selection is not applicable, the control group will be drawn from individuals immediately below the cut-off for project eligibility (the regression discontinuity approach).

A summary of the final design will be included as an attachment to this M&E Plan.

Data

At least two data sources will be employed to evaluate AAF:

- **Application Data.** During the process of applying for financing, detailed information of applicant characteristics will be provided or created. For the treatment group, this information will be centrally located with the Credit Line Directorate. Corresponding data for the control group may or may not be available through this same mechanism depending on the methodology used to identify it. In this case, alternatives for obtaining the necessary data will be established.
- **AAF Survey.** MCA Moldova M&E Unit has planned and budgeted to conduct a survey related to AAF activity in every year of the Compact. MCC Impact Evaluation Contractor will take a leading role in preparing the questionnaire and defining the sampling strategy for this survey. The contracting for this survey is the responsibility of MCA Moldova.

Reporting

The Evaluation Report of the AAF pilot Phase is to be submitted 33 months after Entry into Force of the Compact, i.e. QIII 2012. Mid-Term Evaluation Report is due 36 months after Entry into Force of the Compact, i.e. QIII 2013, and Final Impact Evaluation Report has to be submitted by July 31st, 2015.

6.2.3. GHS Evaluation

Evaluation Questions

- Primary questions:

1. How much greater are net household incomes for participants as a result of the GHS Training and technical assistance Sub-Activities?
 2. What is the mechanism through which any increase in incomes occurs (cropping mix and intensity, yields, selling price, etc)?
 3. To what extent does the GHS TA Sub-Activity increase impacts compared to the GHS Training Sub-Activity alone?
- Secondary questions:
 1. What are the differences in the results of the primary questions as they relate to the gender, age of farm decision-makers or differences in the demographic composition of farm households?

Evaluation Methodology

At the time of Compact EIF, a basic evaluation design was established. The evaluation will address the treatment effect both within and outside CIS areas. However, this design is expected to differ between the two populations as the farmers to receive training within CIS are already defined so opportunities for randomization could be more limited. Treatment from the GHS Activity can occur in two instances: a beneficiary either (i) receives assistance from Sub-Activity 2 (“Training to Upgrade Production and Ability to Meet Buyer Requirements”) or (ii) from both Sub-Activity 2 and Sub-Activity 3 (“Demand Driven Technical Assistance to Upgrade the HVA Value Chain”).

Cooperation between the USAID-hired Implementer of GHS Activity, MCA Moldova and MCC Impact Evaluator will be used to develop the methodology of the evaluation.

A summary of the final design will be included as an attachment to this M&E Plan.

Data

Because of the need to define the sample framework, the earliest period when the initial Farm Survey setting the baseline could be organized is the end of Year 1 of Compact implementation. The initial survey would examine 2011 growing season results.

The midterm Farm Survey has the purpose of providing early data to identify treatment effects and will be organized in Fall 2013. This survey will be incorporated with the initial CIS farm survey discussed above in one combined exercise. The midterm Farm Survey will look at beneficiaries both inside and outside Target Areas. The same approach will be used for the Final Farm Survey in Year 4. There will also be a survey at the end of the Compact period; however the final quarters of the Compact coincide with the summer season, which makes a farm survey very difficult. During the summer, farmers do not yet know the yields or prices for their production, and they do not have time to answer a lengthy survey. Therefore, the final data collection is expected to be an abbreviated form of the standard Farm Survey.

Two data sources will be used:

- Farm Operator Survey 2009. Even if it is a weak baseline relative to the GHS activities outside of CIS areas, this survey could serve a source for power calculations and for learning about optimal questionnaire and sample design.
- Farm Survey. MCA Moldova’s M&E unit has planned and budgeted to conduct a farm operator survey of the GHS beneficiaries. The MCC Impact Evaluation Contractor is expected

to take the lead role in preparing this survey, while the contracting of this survey will be the responsibility of MCA Moldova.

Reporting

Mid-Term Evaluation Report is due 36 months after Entry into Force of the Compact, i.e. QIII 2013, and Final Impact Evaluation Report has to be submitted by July 31st, 2015.

6.2.4. Road Rehabilitation Project Evaluation

Evaluation Question(s)

1. What is the ex-post cost-benefit ratio of the road rehabilitation? (Where benefits are defined by the HDM-IV model.)

Mid-Term and Final Evaluation

To facilitate the Mid-Term and Final Evaluation, the project output will be recorded and reported by the implementer (State Road Administration), who would also employ a Construction Supervisor to monitor the quality of the work with respect to the contract documents, detailed designs, and specifications.

MCC Impact Evaluation

HDM-IV analysis simulates total life cycle conditions and estimates benefits and total costs by comparing total cost streams for various design and maintenance strategies. The model estimates cost savings accruing to transport operators and consumers of transport services following the improvement of road surface conditions and geometries. This approach measures direct cost savings to road users, which approximate the full economic benefits accruing both directly and indirectly to the general population. Benefits can be realized as increased real incomes (or reduced cost of living), reduced costs of production in agriculture, industry, and services, and enhanced time availability. Whereas this approach allows for a relatively accurate quantification of project benefits, it does not allow one to project the precise nature and allocation of benefits. The primary effects that are considered include reduced vehicle operating costs, reduced travel time, changes in maintenance costs, increases in the value of goods moved, more frequent travel, and possibly environmental effects. These benefits can in principle accrue through normal, generated, and/or diverted traffic.¹⁸

Other methodologies for conducting an impact evaluation of the roads project were considered but not adopted. Most notably, at the end of the project household and firm incomes within the road catchment could be compared to a counterfactual (either a geographic comparison group or the same households/firms before the intervention). However, several factors made this option less attractive than the HDM-IV approach. First, MCC is currently using the household/firm income approach in other countries, so the absence of information in the road sector is not as great as the absence in other sectors. Second, the cost and complexity of a household/firm income evaluation methodology is much greater than the HDM-IV approach. Third, the timing of significant observable impacts is likely to be quite late with any methodology giving the implementation schedule and the expected time for the economy to react to the improvements; HDM-IV using traffic counts is expected to be able to observe

¹⁸ Normal represents growth of existing baseline traffic. Generated traffic is a one-time jump of traffic due to the project – generally found in rehabilitation of roads that were previously impassable or new construction to something that was previously inaccessible. Diverted traffic is traffic that would move from an alternate route to the project road as a result of the rehabilitation.

results sooner than a household/firm income approach. Finally, finding a convincing counterfactual region and/or time would be extremely difficult given the uniqueness of the road being rehabilitated; any analysis based on a counterfactual would need to make very strong assumptions that could undermine the conclusions. Given these factors, the HDM-IV approach was selected.

Data

Traffic counts will be collected by SRA with MCA-Moldova financial support as necessary. Input prices will be collected by SRA and/or the consultant hired to assist in running the model.

Reporting

The evaluation report's scheduled due date is mid-2015 (Quarter 19 of the Compact).

7. IMPLEMENTATION AND MANAGEMENT OF M&E

7.1. Reporting Requirements

Performance reports serve as a vehicle by which the MCA Management informs MCC of implementation progress and on-going field revisions to Project work plans. Currently, MCC requires that MCA-Moldova submit a Quarterly Disbursement Request Package (QDRP) each quarter. The QDRP must contain a quarterly **Indicator Tracking Table** (ITT) which tracks progress against indicators in the M&E Plan. Guidance on fulfilling these reporting requirements is available on the MCC website at: (<http://www.mcc.gov/pages/countrytools/tools/compact-implementation>).

To sustain this system, the Implementing Entities will be required under this M&E Plan to report on the degree of Project performance under their portfolios, as further demonstrated in Attachment 3.

At the end of the Compact, MCA-Moldova will prepare a Compact Completion Report (CCR). The CCR shall be prepared according to guidelines provided by MCC.

7.2. M&E Workplan

One of the key instruments of this M&E Plan is the M&E Workplan, which establishes the timeline for all Monitoring and Evaluation activities. Since the workplan is a planning tool in a dynamic Compact implementation environment, annual or quarterly revisions are expected. Such revisions will be discussed with MCC. Because of the dynamic nature of the workplan, it is not presented as a part of this M&E Plan.

7.3. Management Information System

The MCC M&E Policy requires that MCA-Moldova establish and maintain a management information system (MIS) to track program progress and monitor the effect of each activity with timely and accurate reporting. The MIS should be developed and implemented in agreement with MCC M&E.

As of November 2010, it is expected that a comprehensive Management Information System (MIS) will be developed for all of MCA-Moldova. As planned, M&E MIS needs will be met through this system. Specifically, the following functionalities are planned for the M&E portion of the system:

- data storage
- automated report preparation
- web based accessibility by the general public-read only
- web based accessibility for data providers-data entry

The M&E Director will be responsible for ensuring that M&E needs are addressed during the development of the comprehensive system.

Until a comprehensive MIS is developed and functional, the M&E Director will be responsible for establishing and maintaining a basic MIS to meet the requirements of the MCC M&E Policy.

7.4. Data Quality Reviews (DQRs)

Data Quality Reviews will be conducted in accordance with the requirements of the MCC M&E Policy.

The objectives of DQRs are to assess the extent to which data meets the standards defined in the MCC M&E Policy in the areas of validity, reliability, timeliness, precision and integrity. Data quality reviews will be used to verify the consistency and quality of data over time across implementing agencies and other reporting institutions. DQRs will also serve to identify where the highest levels of data quality is not possible, given the realities of data collection. DQRs will help ensure that.

The particular objectives for the data quality reviews will be identification of the following parameters: i) what proportion of the data has quality problems (completeness, conformity, consistency, accuracy, duplication, integrity); ii) which of the records in the dataset are of unacceptably low quality; iii) what are the most predominant data quality problems within each field.

MCA Moldova will contract an independent data quality reviewer in compliance with MCC Program Procurement Guidelines. The entity responsible for data quality reviews should be hired in Year 2 of the Compact. The M&E Officer and other Officers, as appropriate, within MCA Moldova and the PIUs should also regularly check data quality. In doing so, MCA Moldova may hire individual data quality monitors to monitor data collection and quality, as needed. Besides independent DQRs, the MCA-Moldova M&E Unit will also conduct field visits on a regular basis or whenever requested by MCC, to review the quality of the data gathered through this M&E Plan. This exercise will be done in coordination with the respective project stakeholders.

7.5. M&E Unit Structure and Responsibilities

The MCA-Moldova M&E Unit will be part of the MCA Management Team, and will be composed of an M&E Director who will have the key responsibility of leading and managing all M&E activities; and an M&E Officer who will support the M&E Director in performing the M&E activities. Additionally, the M&E Unit will hire short-term support on an as needed basis. The M&E Unit will carry out, or hire contractors to complete the following and other related activities:

- Direct implementation of all activities laid out in the M&E Plan and ensure all requirements of the M&E Plan are met by MCA-Moldova;
- Ensure that the M&E Plan and ERR analysis are modified and updated as improved information becomes available;
- Oversee development and execution of an M&E system (including data-collection, data-analysis and reporting systems) integrated with the Management Information System;
- Elaborate and document M&E Policies, Procedures and Processes in an M&E Manual or other format, to be used by all MCA-Moldova staff and project implementers;
- Communicate the M&E Plan and explain the M&E system to all key stakeholders involved in the Compact, particularly project implementers, to ensure a common understanding by all. This could take the form of orientation and capacity building sessions and could focus on issues as:
 - Explaining indicator definitions, data collection methods and timing/frequency of data collection and reporting,
 - Data quality controls and verification procedures,
 - Impact evaluation questions and methodology, etc;

- Develop and use a documentation system to ensure that key M&E actions, processes and deliverables are systematically recorded. This may be accomplished either as part of the M&E information system or independently. The documentation may encompass the following elements:
 - Goal, objective and outcome indicators,
 - Performance indicators (to be developed by implementers and added subsequently to the M&E Plan),
 - Changes to the M&E Plan,
 - Key M&E deliverables including TORs, contracts/agreements, data collection instruments, reports/analyses, etc;
- Develop (with the Communication Unit and ESA/Gender officers) and implement a systematic dissemination approach to ensure participation of all the stakeholders, and to facilitate feedback of lessons learned into the compact implementation process;
- Organize and oversee regular independent data quality reviews on a periodic basis to assess the quality of data reported to MCA-Moldova;
- Participate in project monitoring through site visits, review of project reports and analysis of performance monitoring and other data;
- Update the M&E workplan periodically;
- Contribute to the design of the impact evaluation strategy;
- Collaborate with the Procurement Director to prepare and conduct procurement of M&E contracts;
- Ensure that data collection mechanisms are designed to collect data disaggregated by gender, age, and other dimensions, as applicable and practical, and that the findings are presented at the appropriate disaggregated level;
- As the champion of results based management, the M&E Unit will take steps to foster a results oriented culture throughout MCA-Moldova and its implementing partners.

The M&E Director will be a part of MCA-Moldova's internal Management Unit, composed from MCA leadership, Project Directors and other Directors. M&E Director will report directly to MCA-Moldova CEO and maintain closest cooperation with Roads Rehabilitation Director, THVA Director, CIS Director, AAF and GHS Directors. Collaboration with procurement team will be very important to prepare and conduct procurement of M&E related contracts as well as ensuring that other implementation contracts contain necessary data reporting provisions.

Seminars, workshops, elaboration and distribution and dissemination of M&E materials shall be conducted in close cooperation with the MCA Communications Unit.

7.6. M&E Requirements for Disbursements

The MCC M&E Policy states that the M&E Plan should include “any M&E requirements that an MCA must meet in order to receive disbursements” (article 5.1.1). The Policy notes that substantial compliance with M&E Plan is a condition for approval of quarterly disbursements. In accordance with these guidelines, the following are envisaged to meet the requirements for substantial compliance with the M&E Plan including, but not limited to:

1. Having fully staffed M&E personnel or actively seeking to fulfill M&E staffing, to MCC's satisfaction.
2. Actively executing the M&E workplan to meet the reporting and data needs of professional monitoring and evaluation of the Compact Program, to MCC's satisfaction.

3. Timely managing and utilizing M&E budget in pursuing the Plan's purposes, to MCC's satisfaction.
4. Maintaining sufficient progress towards achievement of target indicators as outlined in the annexes to this Plan, to MCC's satisfaction.

7.7. Review and Revision of the M&E Plan

The M&E Plan is designed to evolve over time, adjusting to changes in program activities and improvements in performance monitoring and measurement. In the fourth quarter of every year, starting in calendar year 2011, or as necessary, the M&E Director of MCA Moldova and representatives of MCC M&E staff will review how well the M&E Plan has met its objectives (the "Annual Review"). The review is intended to ensure that the M&E Plan measures program performance accurately and provides crucial information on the need for changes in project design. The review is intended to ensure that the M&E Plan:

- Shows whether the logical sequence of intervention outcomes are occurring;
- Checks whether indicator definitions are precise and timely;
- Checks whether M&E indicators accurately reflect program performance;
- Updates indicator targets, as allowed by the MCC M&E Policy; and
- Adds indicators, as needed, to track hitherto unmeasured results.

The M&E Plan will be revised by MCA-Moldova, in agreement with MCC M&E, when the need for change has been identified in the review. The revised M&E Plan will be submitted to the MCA-Moldova Steering Committee for approval (if changes are substantial) and to MCC for acceptance.

At the mid-point of the Compact Term, MCA-Moldova will conduct a **mid-term review** of the Program. The review will draw on all performance reports and analyses prepared to date. The purpose will be to determine if the Program and its component projects are on track to achieving the final targets established in the Compact and agree on corrective actions where needed. The format of the review and the specific questions/issues to be addressed will be determined by MCA Moldova in consultation with MCC. The mid-term review will replace the Annual Review (AR) for that year.

7.8. M&E Plan Assumptions and Risks

As with any large Compact program, a number of assumptions and risks could influence the normal process of its implementation according to the schedule and resources allocated. The assumptions and risks presented below are deemed to be applicable to this Monitoring and Evaluation Plan and other program components that relate directly to monitoring and evaluation issues. Assumptions are basically details associated with activities assumed ahead that need to occur for the monitoring and evaluation to be successfully implemented, while risks are considered factors that might restrict or limit the success of M&E.

Monitoring	
Assumptions	
	<ul style="list-style-type: none"> • The Compact Goal, the Program Objective and the Project Objectives and key indicators of long-term impact are limited to those described in the Millennium Challenge Compact • The monitoring indicators are measured against established baselines and targets, derived

<p>from ex-ante economic rate of return analysis, and other types of analysis and other project planning documents</p> <ul style="list-style-type: none"> • The milestones are completed according to project procurement plan timeline and project deliverables are subject to the specified number of review cycles.
<p>Risks</p> <ul style="list-style-type: none"> • Any modifications of Compact Goal, the Program Objective and the Project Objectives will require Program Logic revision with indicator definition table adjustment for amending the M&E Plan. This could affect the monitoring process and developed strategies for impact evaluations. • Modifications to Program Objective and the Project Objectives may constrain the ability of the project team and implementing entities to meet interim dates identified in the original project procurement plan timetable • Due to the gap between the surveys that were used for calculation of the baselines (2008) and the time scheduled to conduct project evaluations MCC and/or stakeholders may require the revision of baselines indicators • Changes in completing certain deliverables by a specific date may be required by Program Management and stakeholders
<p>Evaluations</p>
<p>Assumptions</p> <ul style="list-style-type: none"> • Evaluation strategies and implementation plan are supported by all involved stakeholders • Evaluation objectives, hypotheses to be tested, evaluation methodology design, quality control and data analysis are limited to those described in the Impact Evaluation Strategies elaborated by the Impact Evaluation Contractor • Impact Evaluation Contractor provides staff qualified on the methodologies, techniques and tools needed to support the implementation process of the impact evaluations as required by MCC • USAID GHS Activity Contractor coordinates the design of GHS Activity interventions with the Impact Evaluation Contractor to ensure the project is implemented in a manner suitable for impact evaluation • Impact evaluation deliverables complies with the quality and clarity criteria outlined by MCC • The Impact Evaluation Report for the AAF Pilot Phase provides explicit findings to inform the decision on AAF Activity extension • Mid-Term Phase Evaluation Report provides exhaustive conclusions to assess the implantation process and design interventions if necessary • Final Impact Evaluation Report presents clear conclusions to establish whether Program results can be reliably attributed to MCC funded interventions
<p>Risks</p> <ul style="list-style-type: none"> • Changes to evaluation strategies and implementation plan could be required by Program Management and the key stakeholders, based on the results provided within initial project evaluations • Impact Evaluation Contractor may face staffing constraints in providing impact evaluation services that will directly affect evaluation strategies and implementation plan • Impact evaluation deliverables may partially or entirely disregard the quality and clarity requirements that will considerably extend the review and examination cycle • GHS Activity is implemented jointly with USAID and GHS Impact Evaluation depends on the implementation status and performance of USAID GHS Activity Contractor • Mid-Term Phase Evaluation may report incomplete and/or inadequate information about the status of project components that may affect the decision making process on interventions to be made in order to achieve program objectives • Delays in implementing project components according to project procurement plan

<p>timeline may affect the impact evaluation implementation plan</p> <ul style="list-style-type: none"> • Deficiencies in final impact evaluation strategy may underestimate/overestimate the impacts and results attributed to MCC funded interventions
Capacity building
<p>Assumptions</p> <ul style="list-style-type: none"> • M&E staff resources are available when and as they are required • MCA Moldova personnel will be properly trained on the tools and techniques needed to support Program monitoring and evaluation. • Investments to develop a highly qualified monitoring and evaluation personnel are ensured by the continuity of the staff
<p>Risks</p> <ul style="list-style-type: none"> • Project components key staff recourses for monitoring and evaluation activities will not be available on a ‘full-time’ basis. • The continuity of the personnel may be affected by various MCA Moldova internal staff policy or/and external grounds
Budget
<p>Assumptions</p> <ul style="list-style-type: none"> • Agricultural Survey services, Ad Hoc and Special studies, and other services to support monitoring and evaluation activities are procured within the limits of the M&E Budget • Impact Evaluation Contractor allocates resources according to the evaluation strategies and implementation plan
<p>Risks</p> <ul style="list-style-type: none"> • Impact evaluation budgets may be inaccurately prepared • Reduced budgets or limited resources may force Program Management to select the most affordable solution instead of the best solution. • Impact Evaluation Contractor may require for new personnel which will affect the budget for the Impact Evaluation

ATTACHMENT 1. ABBREVIATIONS

AAF	Access to Agricultural Finance
AM	Apele Moldovei
APR	Annual Portfolio Review
ASR	Annual Supplemental Report
BAU	Business as Usual
CIS	Central Irrigation Systems
CISRA	Central Irrigation Systems Rehabilitation Activity
DQR	Data Quality Review
ERR	Economic Rate of Return
GDP	Gross Domestic Product
GHS	Growing High Value Agriculture Sales
HDM	Highway Design Model
HVA	High Value Agriculture
IE	Impact Evaluation
ISRA	Irrigation Sector Reform Activity
ITT	Indicator Tracking Table
QDRP	Quarterly Disbursement Request Package
MCC	Millennium Challenge Corporation
MCA	Millennium Challenge Account
M&E	Monitoring and Evaluation
MIS	Management Information System
NBS	National Bureau of Statistics
PCR	Program Completion Report
PIM	Project Implementation Manager
QDRP	Quarterly Disbursement Request Package
SPS	Sanitary and Phytosanitary Standards
SRA	State Road Administration
THVA	Transition to High Value Agriculture Project
TOR	Terms of Reference
USAID	United States Agency for International Development
WUA	Water User Association

ATTACHMENT 2. M&E BUDGET

The budget for the implementation of the proposed M&E activities for the five-year term of the Compact is US\$ 3.54 million. The line items of this budget will be reviewed and updated as the program develops, on annual or quarterly basis, when the respective quarterly detailed financial plan is submitted to MCC with the quarterly disbursement request.

The M&E budget does not include the M&E staff in the MCA-Moldova Management Unit whose salaries and field trips are included in the administrative budget of the Compact. The budget should not exceed the total amount over the five years, but the distribution of funding between line items and years may be adjusted according to the results of the M&E Plan's annual reviews or quarterly if needed.

Summary M&E Budget (million USD)

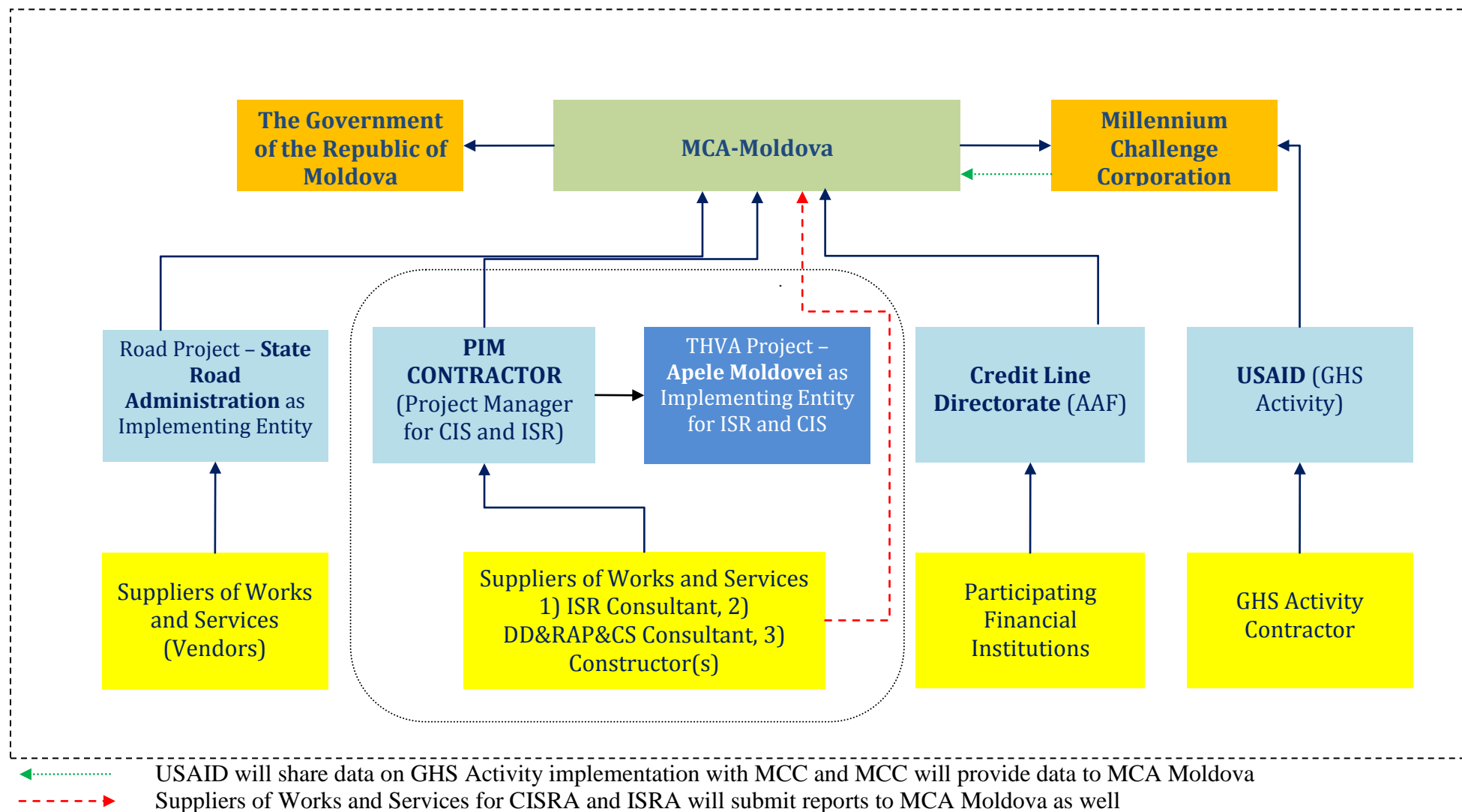
Monitoring and Evaluation Activities	Sub-Activities	CIF	Year 1	Year 2	Year 3	Year 4	Year 5	Total, USD
Studies and Surveys	Farm Survey (CIS and GHS)*							
	AAF Survey*							
	GHS (Value Chain) Survey*							
	Credit and Finance Study							
	Subtotal	\$0.00	\$0.23	\$0.24	\$0.63	\$0.26	\$0.67	\$2.03
Capacity Building	MCA M&E Staff							
	MCA Short-term Support							
	Support to PIUs							
	Support for SRA (HDM-IV)							
	Database, hardware, software, and training (MIS)							
	Subtotal	\$0.02	\$0.18	\$0.06	\$0.07	\$0.05	\$0.16	\$0.53
Data Quality Reviews	External Review and Support Enhancement							
	Subtotal	\$0.00	\$0.07	\$0.00	\$0.07	\$0.00	\$0.08	\$0.21
Evaluation	Final project evaluations							
	Mid-term evaluations							
	SPS Assessment							
	Support for external IE firm, incl. publicity, outreach, training, workshops, evaluation panel							
	Subtotal	\$0.01	\$0.01	\$0.01	\$0.17	\$0.09	\$0.47	\$0.77
Total - M&E		\$0.02	\$0.49	\$0.31	\$0.94	\$0.40	\$1.38	\$3.54

* targeted to be procured together

note: individual line item values are not noted in this Plan for procurement reasons

While the resources for the carrying-out of surveys are allocated by MCA-Moldova from the Compact funds, the impact analysis is to be funded directly by MCC. MCC will commit approximately \$1.9 million to fund the external impact evaluators. The M&E Plan calls for coordination of research design and implementation with the impact analysis.

ATTACHMENT 3. REPORTING/DATA FLOW STRUCTURE OF MOLDOVA COMPACT



ATTACHMENT 4. INDICATOR DEFINITION TABLE

COMPACT GOAL INDICATORS					
Indicator Name	Indicator Definition	Unit	Source	Methodology of Data Collection	Timing/Frequency of Data Collection
Absolute poverty rate nationwide*	National absolute poverty rate as measured by the National Bureau of Statistics	percentage	National Bureau of Statistics	Household Budget Survey ¹⁹	Annually (when available)
Absolute poverty rate in rural areas*	Absolute poverty rate in villages (as disaggregated by the National Bureau of Statistics by residence environment)	percentage	National Bureau of Statistics	Household Budget Survey	Annually (when available)

Transition to High Value Agriculture Project					
Indicator Name	Indicator Definition	Unit	Source	Methodology of Data Collection	Timing/Frequency of Data Collection
Objective Level					
Annual profits of crop production per hectare in Target Area*	Average annual profits of farms in Target Areas ²⁰ (defined as average annual profits from crop production/average size of farm)	USD / ha	MCC Impact Evaluation Consultant	Farm Survey	Pre-Compact Baseline, Year 3, Year 4, Year 5
Rent for land paid to lessors per hectare in Target Area*	Average rent paid by lessee to lessor per hectare of rented land in Target Areas	USD / ha	MCC Impact Evaluation Consultant	Farm Survey	Pre-Compact Baseline, Year 3, Year 4, Year 5

¹⁹ The Household Budget Survey (HBS) is a nationally representative survey that provides information on living standards in Moldova through the collection of household income and consumption data, as well as non-monetary indicators covering education, health, employment, housing, asset ownership, and self-assessed living conditions. The HBS is used to calculate poverty lines and poverty measures and generate poverty profiles that describe poverty characteristics and assess how policies and programs affect the socio-economic situation of the population. The HBS is regularly conducted by the National Bureau of Statistics and will not require MCA-Moldova financial support.

²⁰ Target Areas are defined as “areas targeted by the Centralized Irrigation System Rehabilitation Activity”

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required

Transition to High Value Agriculture Project					
Indicator Name	Indicator Definition	Unit	Source	Methodology of Data Collection	Timing/Frequency of Data Collection
Wage bill paid to labor per hectare in Target Area*	Value of labor (defined as annual person-days of labor per hectare in target areas × average daily wage excluding household labor)	USD / ha	MCC Impact Evaluation Consultant	Farm Survey	Pre-Compact Baseline, Year 3, Year 4, Year 5
Area irrigated in Target Areas*	Number of hectares of irrigated crops (high value agriculture, grains and technical crops) in Target Areas	ha	MCC Impact Evaluation Consultant	Farm Survey	Pre-Compact Baseline, Year 3, Year 4, Year 5
Adoption of HVA crops in Target Areas*	Number of hectares of irrigated and non-irrigated high value agriculture crops (fruits, grapes, vegetables, potatoes, etc.) in Target Areas	ha	MCC Impact Evaluation Consultant	Farm Survey	Pre-Compact Baseline, Year 3, Year 4, Year 5
Hectares under production †	Total number of hectares under agricultural production with MCC support, including irrigation systems, agricultural inputs, credits, or technical assistance. This will be calculated as ha supported by GHS inside and outside CIS. Hectares receiving irrigation support will have very high overlap with GHS hectares; therefore irrigation support hectares are not included in this indicator to avoid double counting.	ha	MCC Impact Evaluation Consultant	Farm Survey	Year 1, Year 3, Year 4, Year 5
Increase in the annual profits among assisted farms outside of Target Areas*	Percent differential between the annual per hectare profit (excluding rent and labor costs) realized among assisted farms outside of Target Areas and a comparison farm group	percentage	MCC Impact Evaluation Consultant	Farm Survey	Year 1, Year 3, Year 4, Year 5

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required

Centralized Irrigation System Rehabilitation Activity (refers to Target Area only)					
Outcome Level					
Hectares under improved or new irrigation ^{21,*†}	Total number of hectares served by existing or new irrigation infrastructure that are either rehabilitated or constructed with MCC funding.	ha	PIM/ISRA	Administrative; Project Implementation documents	Annually
Output Level					
Centralized irrigation systems rehabilitated*	Number of centralized irrigation systems with rehabilitation works completed under Compact	CIS	PIM/CISRA	Administrative; Project Implementation documents	Annually
Process					
Value of irrigation feasibility and/or detailed design contracts signed‡	The value of all signed feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments. If the value of a contract changes, the amount of the change (either + or -) should be reported in the quarter where the change occurred.	million USD	PIM / Fiscal Agent	Administrative; Project Implementation documents	Quarterly
Value of contracted irrigation feasibility and/or design studies disbursed‡	The value of all disbursements for feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments.	million USD	PIM / Fiscal Agent	Administrative; Project Implementation documents	Quarterly
Percent of contracted irrigation feasibility and/or design studies disbursed†	Total amount of all signed feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments	percentage	PIM / Fiscal Agent	Administrative; Project Implementation documents	Quarterly

²¹ This indicator appears in the Compact but the indicator name and definition were adjusted to match the Common Indicator covering the same concept. The actual measurement is unchanged. The indicator name in the Compact was “Command area with access to functional systems expands.” This indicator is also a component of MCC’s Common Indicator “Hectares under production.”

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required

	disbursed divided by total value of all contracts awarded. Denominator = Value of signed contracts for studies. Numerator = Amount of money disbursed on these contracts.				
Value of irrigation construction contracts signed [‡]	Total value of all signed construction contracts for agricultural irrigation investments. If the value of a contract changes, the amount of the change (either + or -) should be reported in the quarter where the change occurred. Cost sharing by others (e.g., co financing by other donors or government) should not be included.	million USD	PIM / Fiscal Agent	Administrative; Project Implementation documents	Quarterly
Value of contracted irrigation construction works disbursed [‡]	Total value of disbursements for all signed construction contracts for agricultural irrigation investments.	million USD	PIM / Fiscal Agent	Administrative; Project Implementation documents	Quarterly
Percent of contracted irrigation construction works disbursed [†]	Total amount of all signed construction contracts for agricultural irrigation investments disbursed divided by total value of all contracts awarded. Denominator = Value of signed contracts for construction. Numerator = Amount of money disbursed on these contracts.	percentage	PIM / Fiscal Agent	Administrative; Project Implementation documents	Quarterly
Irrigation Sector Reform Activity (refers to Target Area)					
Outcome Level					
Improved perception of quality of service by water users*	Percentage of centralized irrigation systems users satisfied with the timeliness, cost and administration of Irrigation.	percentage	MCC Impact Evaluation Consultant	Farm Survey	Pre-Compact Baseline, Year 3, Year 4, Year 5

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required

WUA's achieving financial sustainability*	Number of assisted WUAs where annual tariffs collected cover 100% of operating costs plus an amount for capital/replacement costs.	WUA	PIM / ISRA	Administrative; Project Implementation documents	Annually
Number of WUA's with active and representative governance*	Number of WUAs complying with transparent governance practices including an annual plan and year end report approved by the respective general assembly.	WUA	PIM / ISRA	Administrative; Project Implementation documents	Annually
Number of WUA's with gender-balanced management and governance*	Number of WUAs having at least 20% of board member positions filled by women	WUA	PIM / ISRA	Administrative; Project Implementation documents	Annually
Revised water management policy framework—with long-term water rights defined—established*	The Water Law which establish long-term water rights is in full force and effect	date	Publication in the Official Monitor (Monitorul Oficial)	Administrative	Once at the moment of publication of law
Revised legal water management framework	Four secondary regulations to be passed establishing the water rights, water registry and basin management	date	PIM / ISRA	Administrative	Once at the moment of publication
Output Level					
Management Transfer Agreements signed*	Number of Management Transfer Agreements signed	agreement	PIM / ISRA	Administrative; Project Implementation documents	Quarterly
Information campaign awareness	Percentage of farm operators within Target Area aware about ISRA out of the total number of farm operators in Target Area	percentage	Local Contractor	Special Survey	A special survey will be conducted in Year 1 by a local contractor to measure the level of

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required

					farm operators' awareness.
WUAs established under new law*	Number of WUAs registered under new specific WUAs law	WUA	PIM / ISRA	Administrative; Project Implementation documents	Quarterly
Water resource management plans prepared	The number of water basin and sub-basin management plans prepared that included the participation of local institutions and stakeholders.	management plan	PIM / ISRA	Administrative; Project Implementation documents	Annually
Process					
ISRA contractor mobilized	Contract with ISRA Consultant is signed and local teams are recruited	date	MCA Moldova	Administrative; Project Implementation documents	Once
Secure structures for new RBM equipment provided	Government has contributed safe and secure structures and places for housing equipment for water measurements	date	MCA Moldova / PIM / ISRA	Administrative; Project Implementation documents	Once
Contracts of association signed	As a precondition of initiation of detailed design all contracts of association of potential WUA members must be signed	date	PIM / ISRA	Administrative; Project Implementation documents	Once
Access to Agriculture Finance Activity (includes Target and non-Target areas)					
Outcome Level					
New HVA infrastructure in place*	Operational cold-storage capacity of high value agriculture post-harvest structures financed under the AAF	metric tones	MCC Impact Evaluation Consultant	AAF Survey	Year 3, Year 5

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required

Additionality factor of AAF investments*	Percentage of the financed amount of the investment deemed to be additional ²²	percentage	MCC Impact Evaluation Consultant	AAF Survey	Year 3, Year 5
Loans past due	Percent of loans more than 60 days overdue on latest payment	percentage	AAF / Credit Line Directorate / PFI	Administrative; Project Implementation documents	Quarterly
Output Level					
Value of agricultural and rural loans ^{23,*†}	Total value of agricultural and/or rural loan funds for on-farm, off-farm, and rural investments provided under the Access to Agriculture Finance Activity for post-harvest infrastructure.	million USD	AAF / Credit Line Directorate / PFI	Administrative; Project Implementation documents	Quarterly
Number of all loans	Number of loans provided under the AAF Activity for post-harvest infrastructure (both those receiving IDS support and those not using IDS)	loans	AAF / Credit Line Directorate / IDS	Administrative; Project Implementation documents	Quarterly
Agricultural loans resulting from Investment Development Services*	Number of loans received by borrowers which received support from Investment Development Services	loans	AAF / Credit Line Directorate / IDS	Administrative; Project Implementation documents	Quarterly
Process Level					
HVA Post-Harvest Credit Facility Policies and Procedures Manual (PPM) Finalized	PPM finalized and approved by MCC	date	MCA Moldova	Administrative; Project Implementation documents	Once
HVA Post-Harvest Credit	Participating Financial Institutions selected and public outreach program	date	MCA Moldova	Administrative; Project	Once

²² For example, if the “additionality target” was 75 percent, then similar individuals who do not access financing from the project are expected to find financing equivalent to or less than 25 percent (100 – 75 = 25) of the financing received by project beneficiaries.

²³ This indicator appears in the Compact but the indicator name and definition were adjusted to match the Common Indicator covering the same concept. The actual measurement is unchanged. The indicator name in the Compact was “Affordable financing provided for post-harvest infrastructure through the High Value Agriculture Post-Harvest Credit Facility.”

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required

Facility Launched	underway			Implementation documents	
Impact Evaluation Process finalized and decision made regarding pilot expansion	Impact Evaluation completed, results processed and decision made by MCC	date	MCA Moldova	Administrative; Project Implementation documents	Once
Close-Out and Facility Transition Plan approved by MCC	Plan as to how the funds will be managed/used after the life of the compact approved by MCC	date	MCA Moldova	Administrative; Project Implementation documents	Once
Growing High Value Sales Activity (includes Target and non-Target areas)					
Outcome Level					
Value of sales facilitated*	Value of annual sales facilitated by the Activity contractor on behalf of Moldovan producers or producer groups	million USD	GHS / USAID GHS Activity Contractor	Administrative; Project Implementation documents	Quarterly
Agricultural businesses with sales facilitated	Number of farmers, producers, processing enterprises reporting transactions facilitated through GHS	entity	GHS / USAID GHS Activity Contractor	Administrative; Project Implementation documents	Quarterly
Number of farmers that have applied improved techniques (GHS) ^{24,*†}	Total number of farmers or rural entrepreneurs that are applying new production or managerial techniques introduced or supported by MCC, such as input use, production techniques, irrigation, post harvest treatment, and farm management techniques.	farmer	GHS/USAID GHS Activity Contractor	Administrative; Project Implementation documents (confirmed by MCC Impact Evaluation)	Quarterly
Number of enterprises that have applied improved	Total number of farmers' associations, post-harvest or processing enterprises,	entity	GHS/USAID GHS Activity Contractor	Administrative; Project	Quarterly

²⁴ This indicator appears in the Compact but the indicator name and definition were adjusted to match the Common Indicator covering the same concept. The actual measurement is unchanged. The indicator name in the Compact was "Farmers apply acquired knowledge."

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required

techniques(GHS) [†]	water management entities, or other rural enterprises that are applying managerial or processing techniques introduced or supported by MCC. When a number of farmers are involved in an association or cooperative, they are not counted individually, but as one entity.			Implementation documents (confirmed by MCC Impact Evaluation)	
Reduced risk of export bans due to improved export certification and inspection systems*	Moldova sanitary and phytosanitary services achieve compliance with IPPC, ISPM Guidelines 7, 20 and 23 and the Central Phytosanitary Laboratory is certified to ISO 9000	date	GHS / USAID GHS Activity Contractor	Independent audit	Once
Output Level					
Number of farmers trained [†]	Total number of farmers or rural entrepreneurs receiving technical assistance (training on production, use of new technologies, and linking to markets) within Target Area and non-Target area	farmer	GHS / USAID GHS Activity Contractor	Administrative; Project Implementation documents	Quarterly
Number of enterprises assisted [†]	Total number of farmers' associations, post-harvest or processing enterprises, water management entities, or other rural enterprises receiving technical or financial assistance within Target Area and non-Target area. This assistance includes support that aim at enterprise or association/cooperative functions, such as processing, management, marketing, and accounting.	entity	GHS / USAID GHS Activity Contractor	Administrative; Project Implementation documents	Quarterly
Process					
MOU in force	A MOU between MCC, MCA Moldova and USAID is signed to set out the understanding of the parties about the roles and responsibilities of USAID, MCC and MCA with respect to the	date	MCC / MCA / USAID	Administrative; Project Implementation documents	Once

* Compact indicator

[†] MCC Common Indicator – target required

[‡] MCC Common Indicator – target not required

	implementation and coordination of the GHS Activity				
GHS activity launched	GHS Contractor mobilized and teams are mobilized	date	MCC / MCA / USAID	Administrative; Project Implementation documents	Once
Phytosanitary laboratory equipped	Laboratory equipment shipped to Phytosanitary laboratory	date	USAID to MCC	Administrative; Project Implementation documents	Once

Roads Rehabilitation Project (Sarateni – Drochia Junction M2)					
Indicator Name	Indicator Definition	Unit	Source	Methodology of Data Collection	Timing/Frequency of Data Collection
Objective Level					
Reduced cost to road users*	Value of time savings and reduced vehicle operating costs with the project compared to no rehabilitation (modeled by HDM4)	million USD	SRA	HDM 4 modeling run by SRA with financial support from MCA Moldova	Beginning of the last Compact Year (Spring 2015)
Average Annual Daily Traffic ^{25,*†}	Average number of vehicles per day, averaged over different times (day and night) and over different seasons to arrive at an annualized daily average on the road segment rehabilitated under Compact	vehicles/day	SRA or independent Traffic Count	Traffic survey	Beginning of Year 5 of the Compact. The period of count (past year or past 12 months) will be decided according to road rehabilitation and completion schedule to

²⁵ This indicator appears in the Compact but the indicator name and definition were adjusted to match the Common Indicator covering the same concept. The actual measurement is unchanged. The indicator name in the Compact was “Increased vehicular activity.”

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required

Roads Rehabilitation Project (Sarateni – Drochia Junction M2)					
Indicator Name	Indicator Definition	Unit	Source	Methodology of Data Collection	Timing/Frequency of Data Collection
Enhanced traffic safety	Number of road accidents on the rehabilitated portion of road	traffic accidents	Road Police Department of the Ministry of Internal Affairs	Road Police Department written reports	account for seasonality. Year 3 and Year 5. The period of reporting (past year or past 12 months) will be decided according to road rehabilitation and completion schedule to account for seasonality.
Outcome Level					
Roughness of the road ^{*,†}	International Roughness Index. IRI measures the roughness of the rehabilitated road and is used to define a characteristic of the longitudinal profile of a traveled wheeltrack and constitutes a standardized roughness measurement	m/km	SRA/Supervising Engineer	Road survey	Upon completion of each road section
Road maintenance expenditure	Annual expenditure for roads maintenance nationwide	million USD	SRA / Ministry of Finance	Administrative, from reports on State budget execution by the Ministry of Finance	Annually
Output Level					
Kilometers of roads completed ^{26,*,†}	The length of roads on which construction or rehabilitation is complete.	kilometer	SRA	Administrative; Project Implementation documents	Quarterly

²⁶ This indicator appears in the Compact but the indicator name and definition were adjusted to match the Common Indicator covering the same concept. The actual measurement is unchanged. The indicator name in the Compact was “Total length of roads rehabilitated.”

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required

Roads Rehabilitation Project (Sarateni – Drochia Junction M2)					
Indicator Name	Indicator Definition	Unit	Source	Methodology of Data Collection	Timing/Frequency of Data Collection
Process					
Final Design	Final design prepared, reviewed and approved	date	SRA / Nathan (with URS/UNIVERSINJ)	Administrative; Project Implementation documents	Once
RAP implemented	RAP implementation completed and approved	date	SRA, MCA Board	Administrative; Project Implementation documents	Once
Permission for Construction	Permission for Construction obtained by SRA for all portions planned for rehabilitation	date	SRA	Administrative; Project Implementation documents	Once
Kilometers of roads under design [‡]	The length of roads under design contracts. This may include building new roads, modifying existing roads, reconstruction, rehabilitation, resurfacing or upgrading.	kilometer	SRA	Administrative; Project Implementation documents	Quarterly
Kilometers (km) of roads under works contracts [†]	The length of roads under works contract for construction or rehabilitation. This may include building new roads or modifying existing roads.	kilometer	SRA	Administrative; Project Implementation documents	Quarterly
Value of signed contracts for road works [‡]	The value of all contracts that MCA has signed with contractors for construction of new or rehabilitated roads. If the value of the contract changes, the amount of the change (either + or -) should be reported in the quarter that the change occurred. Cost sharing by others (e.g., co financing by other donors or government) should	million USD	SRA / Fiscal Agent	Administrative; Project Implementation documents	Quarterly

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required

Roads Rehabilitation Project (Sarateni – Drochia Junction M2)					
Indicator Name	Indicator Definition	Unit	Source	Methodology of Data Collection	Timing/Frequency of Data Collection
	not be included.				
Value of contracted roads works disbursed [‡]	The value of disbursement for all contracts that MCA has signed with contractors for construction of new or rehabilitated roads.	million USD	SRA / Fiscal Agent	Administrative; Project Implementation documents	Quarterly
Percent of contracted roads works disbursed [†]	The aggregate amount disbursed divided by all signed contracts for construction of new or rehabilitated roads. Denominator = Value of signed contracts for roads works as defined above. Numerator = Amount of money disbursed on the signed contracts for roads works. This is a proxy indicator for physical completion of road works. However, since the numerator includes industry standard advance payments and mobilization fees, it does not correlate perfectly with physical progress. (cumulative)	percentage	SRA / Fiscal Agent	Administrative; Project Implementation documents	Quarterly

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required

ATTACHMENT 5. Indicators Tracking Tables

Indicator Name	Unit	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5
COMPACT GOAL INDICATORS							
Absolute poverty rate nationwide* (level)	%	30.2%	24.5%	23.4%	22.3%	21.1%	20.0%
Absolute poverty rate in rural areas* (level)	%	34.1%	27.7%	26.4%	25.1%	23.9%	22.6%

Indicator Name	Unit	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5
Transition to High Value Agriculture Project							
Objectives							
Annual profits of crop production per hectare in Target Area* (level)	USD / ha	180	n/a	n/a	180	180	390
Rent for land paid to lessors per hectare in Target Area * (level)	USD / ha	80	n/a	n/a	80	80	100
Wage bill paid to labor per hectare in Target Area * (level)	USD / ha	40	n/a	n/a	40	40	180
Area irrigated in Target Areas* (cumulative)	ha	1100	n/a	n/a	1100	2280	3460
Adoption of HVA crops in Target Areas* (cumulative)	ha	1800	n/a	n/a	1800	2320	2840
Hectares under production [†] (cumulative) ²⁷	ha	0	990	n/a	4020	6150	8400
Increase in the annual profits among assisted farms outside of Target Areas* (level)	%	0%	0%	n/a	10%	15%	20%
Centralized Irrigation System Rehabilitation Activity (refers to Target Area)							
Outcomes							
Hectares under improved or new irrigation* [†] (cumulative)	ha	0	0	0	0	6200	15500
Outputs							
Centralized irrigation systems rehabilitated* (cumulative)	CIS	0	0	0	0	4	11
Process							
Value of irrigation feasibility and/or detailed design contracts signed [‡]	million USD	0	3.6	3.6	3.6	3.6	3.6

²⁷ The targets are based on the number of farmers trained by GHS adopting the new practices. It is assumed each farmer will apply the practices to 3 hectares.

* Compact indicator

[†] MCC Common Indicator – target required

[‡] MCC Common Indicator – target not required

Indicator Name	Unit	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5
Transition to High Value Agriculture Project							
(cumulative)							
Value of contracted irrigation feasibility and/or design studies disbursed (cumulative)	million USD	0	1.8	3.6	3.6	3.6	3.6
Percent of contracted irrigation feasibility and/or design studies disbursed (cumulative) [†]	%	0	50%	100%	100%	100%	100%
Value of irrigation construction contracts signed [‡] (cumulative)	million USD	0	n/a	n/a	53.9	53.9	53.9
Value of contracted irrigation construction works disbursed [‡] (cumulative)	million USD	0	n/a	n/a	16.2	43.1	53.9
Percent of contracted irrigation construction works disbursed [‡] (cumulative)	%	0	n/a	n/a	30%	80%	100%
Irrigation Sector Reform Activity							
Outcomes							
Improved perception of quality of service by water users* (level)	%	41%	n/a	n/a	41%	43%	75%
WUA's achieving financial sustainability* (cumulative)	WUA	0	0	0	7	7	11
Number of WUA's with active and representative governance* (cumulative)	WUA	0	0	7	7	7	11
Number of WUA's with gender-balanced management and governance* (cumulative)	WUA	0	0	6	6	6	9
Revised water management policy framework—with long-term water rights defined—established*	date		Apr-2011				
Revised Legal Water Management Framework	date				Aug-2013		
Output							
Management Transfer Agreements signed* (cumulative)	agreement	0	0	7	7	11	11
Information campaign awareness	percentage	0	95%	n/a	n/a	n/a	n/a
WUA established under new law* (cumulative)	WUA	0	0	11	11	11	11
Water Resource Management	managem	0	TBD ²⁸	TBD	TBD	TBD	TBD

²⁸ The number of management plans will be defined by ISR Consultant in Year 1 of its activity.

* Compact indicator

[†] MCC Common Indicator – target required

[‡] MCC Common Indicator – target not required

Indicator Name	Unit	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5
Transition to High Value Agriculture Project							
Plans prepared (cumulative)	ent plan						
Process							
ISRA Contractor mobilized	date		Nov-2010				
Secure structures for new RBM equipment provided	date			Sep-2011			
Contracts of association signed	date		Feb 2011				
Access to Agriculture Finance Activity							
Outcomes							
New HVA infrastructure in place* (cumulative)	metric tones	0	0	n/a	3800	n/a	10500
Additionality factor of AAF investments* (level)	%	0	n/a	n/a	75%	n/a	75%
Loans past due (level)	%	n/a	0%	5%	5%	5%	5%
Output							
Value of agricultural and rural loans* [†] (cumulative)	million USD	0	1.5	3.5	4.5	9.5	14.9
Number of all loans (cumulative)	loan	0	8	18	23	48	75
Agricultural loans resulting from Investment Development Services* (cumulative)	loan	0	5	12	16	35	55
Process							
HVA Post-Harvest Credit Facility Policies and Procedures Manual (PPM) Finalized	date		June 2011				
HVA Post-Harvest Credit Facility Launched	date		Aug 2011				
Impact Evaluation Process finalized and decision made regarding pilot expansion	date				May 2013		
Close-Out and Facility Transition Plan approved by MCC	date				TBD ²⁹		
Growing High Value Sales Activity							
Outcomes							
Value of sales facilitated* (cumulative)	million USD	0	2.1	6.3	12.6	21.0	31.5
Agricultural businesses with sales facilitated (cumulative)	entity	0	100	300	600	1000	1500
Number of farmers that have	farmer	0	330	550	1340	2050	2800

²⁹ This target date will be provided by MCA-Moldova when they finish their AAF workplan.

* Compact indicator

[†] MCC Common Indicator – target required

[‡] MCC Common Indicator – target not required

Indicator Name	Unit	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5
Transition to High Value Agriculture Project							
applied improved techniques (GHS) (cumulative)* [†]							
Number of enterprises that have applied improved techniques (GHS) (cumulative) [†]	entity	0	TBD ³⁰	TBD	TBD	TBD	TBD
Reduced risk of export bans due to improved export certification and inspection systems*	date						Aug-2015
Outputs							
Number of farmers trained (cumulative) [†]	farmer	0	500	850	1340	3150	4300
Number of enterprises assisted (cumulative) [†]	entity	0	TBD ³¹	TBD	TBD	TBD	TBD
Process							
MOU in force	date		Dec-2010				
GHS activity launched	date		Jan-2011				
Phytosanitary laboratory equipped	date		TBD ³²				

Indicator Name	Unit	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5
Roads Rehabilitation Project (Sarateni – Drochia Junction M2)							
Objectives							
Reduced cost for road users* (level)	million USD	0	n/a	n/a	n/a	n/a	112
Average Annual Daily Traffic* ^{†,33} (level)	vehicles / day	3009	n/a	n/a	n/a	n/a	4270
Enhanced traffic safety (level)	traffic accidents	28	n/a	n/a	n/a	n/a	n/a ³⁴
Outcomes							
Roughness of the road* [†] (level)	m/km	12	n/a	n/a	n/a	n/a	2
Road maintenance	million	35.8	49.7	63.6	81.5	99.0	106.0

³⁰ The GHS contractor will provide targets for enterprises applying improved techniques. At the time of M&E Plan approval the GHS contract had not yet been awarded.

³¹ The GHS contractor will provide targets for enterprises applying improved techniques. At the time of M&E Plan approval the GHS contract had not yet been awarded.

³² The GHS contractor will provide timing for equipping laboratory. At the time of M&E Plan approval the GHS contract had not yet been awarded.

³³ AADT for the full road was calculated using a weighted average for road segments based on each segment's length. See file "Roads Beneficiary and Indicators Calculations v5.xlsx" for details on this calculation.

³⁴ The number of traffic accident will be provided by Road Police Department in Year 5. This indicator is for tracking purposes only and no target will be assigned to it.

* Compact indicator

[†] MCC Common Indicator – target required

[‡] MCC Common Indicator – target not required

Indicator Name	Unit	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5
Roads Rehabilitation Project (Sarateni – Drochia Junction M2)							
expenditure (level)	USD						
Outputs							
Kilometers of roads completed* [†] (cumulative)	kilometer	0	0	TBD ³⁵	TBD	TBD	93
Process							
Final Design	date		Jun-2011				
RAP implemented	date			Sep-2011			
Permission for Construction	date			Sep-2011			
Kilometers of roads under design [‡] (cumulative)	kilometer	0	93	93	93	93	93
Kilometers of roads under works contracts [‡] (cumulative)	kilometer	0	0	93	93	93	93
Value of signed contracts for road works [‡] (cumulative)	million USD	0	0	122.0	122.0	122.0	122.0
Value of contracted roads works disbursed [‡] (cumulative)	million USD	0	0	TBD ³⁶	TBD	TBD	TBD
Percent of contracted roads works disbursed [†] (cumulative)	%	0	0	TBD ³⁷	TBD	TBD	100%

³⁵ Detailed Design will include information on the length of rehabilitated roads by Year

³⁶ MCA-Moldova Infrastructure Unit to provide targets for disbursements of road construction.

³⁷ MCA-Moldova Infrastructure Unit to provide targets for disbursements of road construction.

* Compact indicator

[†] MCC Common Indicator – target required

[‡] MCC Common Indicator – target not required

ATTACHMENT 6. Indicator Disaggregation

The following indicators will be collected so that disaggregation according to the noted dimensions (gender, age, income, and/or farm size) will be possible. To facilitate efficient ITT reporting, only a select set of these indicators will be disaggregated in the ITT.

INDICATORS TO BE DISAGGREGATED				
Indicators	Gender	Age	Income	Farm size
PROGRAM				
Absolute poverty rate nationwide	X	X		
Absolute poverty rate in rural areas	X	X		
Transition to High Value Agriculture Project				
Improved perception of quality of service by water users	X	X	X	X
Information campaign awareness	X	X	X	X
New HVA infrastructure in place	X	X	X	X
Number of all loans*	X	X	X	X
Loans past due	X			
Agricultural loans resulting from Investment Development Services	X	X	X	X
IDS Consultancy applications	X	X	X	X
Value of sales facilitated	X	X	X	X
Number of farmers that have applied improved techniques (GHS)*	X	X	X	X
Number of enterprises that have applied improved techniques (GHS) (gender of enterprise head) *	X	X	X	X
Number of farmers trained*	X	X	X	X
Number of enterprises assisted (gender of enterprise head)*	X	X	X	X

* To be disaggregated in quarterly ITT reporting.

* Compact indicator

† MCC Common Indicator – target required

‡ MCC Common Indicator – target not required